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- (54) Bezeichnung des Gegenstandes
Demontierbare Sportbodenbelagbahn
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Demontierbarer Sportbodenbelag

Die vorliegende Neuerung bezieht sich auf einen demontierbaren Sportbodenbelag, bestehend aus mehreren stoßend verlegten Unterplatten, mit jeweils einer elastischen Schicht, und auf den Unterplatten, zu deren Stoßnähten versetzt angeordneten, durch Formschlußteile lösbar miteinander verbundenen Lauf- und Druckverteilungsplatten, die in zueinander versetzten Reihen verlegt sind, wobei längere Formschlußteile in Längsrichtung und kürzere in Querrichtung verlaufen.

- 5
- 10 Aus der DE-OS 28 12 555.2 ist ein derartiger Sportbodenbelag bekannt. Die darin beschriebenen Formschlußteile bestehen einmal aus mit Stiften versehenen Verbindungsplatten, auf denen die Lauf- und Druckverteilungsplatten aufliegen, wobei gleichzeitig die Stifte in Buchsen eingreifen, die in den Lauf- und Druckverteilungsplatten angeordnet sind, zum anderen werden die Formschluß-
- 15 teile gebildet durch in Längsnuten der Lauf- und Druckverteilungsplatten eingeschobene Federn, die eine Arretierung der Platten in vertikaler Richtung bewirken, während die eingreifenden Stifte ein horizontales Verrutschen verhindern.

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- 5 Nun hat sich aber in der Praxis gezeigt, daß die Verwendung derartiger Formschlußteile bei der Verlegung von demontierbaren Sportbodenbelägen zeitaufwendig und mühsam ist, da das Eingreifen der Stifte in die Buchsen der Platten deren paßgenaues
- 10 Auflegen erfordert. Bei der geringsten Verformung der Verbindungsplatten, wie sie durchaus bei der Demontage eines Sportbodenbelages und der anschließenden Lagerung der Einzelteile vorkommen kann, kann ein einfaches Aufstecken der Lauf- und Druckverteilungsplatten schon nicht mehr erfolgen, so daß
- 15 eine Nacharbeit der entsprechenden Verbindungsplatte unumgänglich ist.
- Auch das nach einem Auflegen der Lauf- und Druckverteilungsplatten auf die Verbindungsplatten erforderliche Einführen der Feder bedeutet letztendlich einen
- 20 zusätzlichen Arbeitsschritt, der natürlich eine entsprechende Zeit in Anspruch nimmt und demzufolge Kosten verursacht.
- Nachteilig ist ebenfalls die Lagerhaltung bei Nichtbenutzung des Sportbodenbelages, da hierbei unterschiedlich gestaltete Formschlußteile aufbewahrt werden müssen.
- 25 Neben den genannten Nachteilen hinsichtlich der Verlegung und Lagerhaltung bringt auch die Herstellung des bekannten Sportbodenbelages Probleme mit sich, da nicht nur die dort vorgesehenen Stifte auf den Verbindungsplatten der Formschlußteile einzeln und paßgenau festgelegt werden müssen, sondern auch das Einbringen
- der Buchsen in die Lauf- und Druckverteilungsplatten nur mit relativ hohem Herstellungsaufwand möglich ist. Bedingt dadurch sind selbstverständlich die Herstellungskosten recht hoch.

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Der vorliegenden Neuerung liegt daher die Aufgabe zugrunde, einen Sportbodenbelag der gattungsgemäßen Art so zu gestalten, daß er kostengünstig herstellbar, einfach und schnell zu montieren bzw. zu demontieren ist und seine Formschlußteile
5 einfach zu lagern und unempfindlich gegen Beschädigungen sind.

Diese Aufgabe wird neuerungsgemäß dadurch gelöst, daß jedes Formschlußteil aus einer Profilschiene besteht, die aus zwei parallel zur Grundfläche der Lauf- und Druckverteilungsplatten, mit Abstand zueinander verlaufenden und durch eine Steg mit-
10 einander verbundenen Flanschen gebildet ist, wobei an mindestens einem Flansch an jeder Längskante eine Abwinklung vorgesehen ist, die in Richtung des anderen Flansches weist, und in die die Lauf- und Druckverteilungsplatten im Querschnitt entsprechende Aufnahmen aufweisen, in die die Profilschienen einschiebbar sind.

Durch die derart ausgestalteten Formschlußteile ist nun eine sehr schnelle Verlegung bzw. Demontage des Sportbodenbelages möglich, wobei besonders vorteilhaft ist, daß Beschädigungen der Formschluß-
15 teile, wie sie auch unter geringer Beanspruchung bislang möglich waren, nunmehr ausgeschlossen sind. Dies schafft nicht nur die Möglichkeit einer schnelleren Arbeitsweise beim Verlegen bzw.
20 Demontieren, sondern auch eine Kostenersparnis hinsichtlich der Reparaturbedürftigkeit der Formschlußteile.

Auch die Lagerhaltung ist bei den neuerungsgemäß ausgebildeten Formschlußteilen wesentlich vereinfacht, insbesondere dann,
25 wenn die Profilschienen, wie eine vorteilhafte Ausgestaltung der Neuerung vorsieht, im Querschnitt um ihre vertikale Achse symmetrisch ausgebildet ist. So gestaltet bestehen die Formschlußteile nunmehr aus nur einem Profil, wobei lediglich die Längen

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wie bisher unterschiedlich gewählt sein müssen.

Des weiteren bedeutet die neuerungsgemäße Ausgestaltung des Sportbodenbelages auch eine wesentliche Vereinfachung in der Herstellung, da die nun als Formschlußteile dienenden Profilschienen, beispielsweise aus Aluminium im Strangpreßverfahren hergestellt werden können, so daß zu deren Herstellung anschließend lediglich ein Ablängen erforderlich ist.

5 Ebenfalls sehr einfach ist auch die Herstellung der entsprechenden Aufnahmenuten, die beispielsweise mittels einfacher Fräswerkzeuge herstellbar sind.

Weitere vorteilhafte Ausgestaltungen sind in den Unteransprüchen gekennzeichnet.

Ein Ausführungsbeispiel der Neuerung wird nachfolgend anhand beigefügter Zeichnungen näher beschrieben.

15 Es zeigen

Figur 1 einen neuerungsgemäß ausgebildeten demontierbaren Sportbodenbelag in perspektivischer Darstellung,

Figur 2 eine teilweise Draufsicht auf den Sportbodenbelag,

Figur 3 einen Querschnitt durch den Sportbodenbelag gemäß der Linie III-III in Figur 2.

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- Der in den Figuren dargestellte demontierbare Sportbodenbelag besteht aus mehreren, stoßend verlegten Unterplatten 1, sowie darauf angeordneten Lauf- und Druckverteilungsplatten 2, die, wie besonders die Figur 1 zeigt, versetzt zu den Stoßnähten der Unterplatten 1 verlegt sind. Durch diese an sich bekannte Verlegungsweise wird ein recht stabiler Verbund erzielt, der verhindert, daß die Unterplatten 1 auseinanderdriften.
- 5 Mit einer elastischen Schicht 3, die beispielsweise aus einem Schaumstoff gebildet sein kann, liegt jede Unterplatte 1 auf einem nicht dargestellten Boden aus Beton, Estrich oder dergleichen. Auf der der Lauf- und Druckverteilungsplatte 2 zugewandten Seite ist auf der elastischen Schicht 3 eine weitere Schicht 4, beispielsweise aus Kunststoff, festgelegt. Diese bildet die Auflage für die Lauf- und Druckverteilungsplatte 2.
- 10
- 15 Mittels Formschlußteilen, die neuerungsgemäß als Profilschienen 5 ausgebildet sind, sind die Lauf- und Druckverteilungsplatten 2 lösbar miteinander verbunden. Dabei sind die Profilschienen 5 so angeordnet, daß sie parallel zu den Stoßkanten der Lauf- und Druckverteilungsplatten 2 verlaufen, wobei längere Profilschienen 5 in Längsrichtung und kürzere in Querrichtung angeordnet sind.
- 20

- Jede Profilschiene 5 ist aus zwei parallel zur Grundfläche der Lauf- und Druckverteilungsplatten 2 verlaufenden und mit Abstand zueinander angeordneten Flanschen 6, 7 gebildet, die durch einen rechtwinklig darauf stehenden Steg 8 miteinander verbunden sind.
- 25 Der der Unterplatte 1 zugewandte Flansch 7 der Profilschiene 5 weist an jeder seiner beiden Längskanten eine Abwinklung 9 auf, die in Richtung des anderen Flansches 6 weist. In den Lauf- und Druckverteilungsplatten 2 sind im Bereich der Profilschienen 5

Aufnahmenuten vorgesehen, die in ihrer Querschnittsform den eingeschobenen Profilschienen 5 so angepaßt sind, daß diese formschlüssig gehalten werden.

- Bei dem vorliegenden Ausführungsbeispiel insbesondere durch den Flansch 6 werden die Lauf- und Druckverteilungsplatten 2 gegen ein vertikales Verschieben gegeneinander gesichert, während eine horizontale Verschiebung durch die Abwinklungen 9 verhindert wird, wobei selbstverständlich der Flansch 6 und die Abwinklungen 9 wie beschrieben formschlüssig in den Aufnahmenuten einliegen.

- Eine weitere vorteilhafte Ausgestaltung der Neuerung ist in der Figur 3 zu erkennen, in der der Flansch 7 so angeordnet ist, daß er mit seiner der Unterplatte 1 zugewandten Außenfläche bündig mit der entsprechenden Unterseite der Lauf- und Druckverteilungsplatte 2 abschließt. Selbstverständlich ist dabei die zugeordnete Aufnahmenut entsprechend ausgeformt. Durch diese Maßnahme wird nicht nur eine für die Verwendung des Sportbodenbelages vorteilhafte Ebenmäßigkeit der gesamten Fläche erreicht, sondern auch die Montage des Sportbodenbelages erleichtert.
- Hierzu kann nämlich zunächst auf die Unterplatten 1 eine Reihe Lauf- und Druckverteilungsplatten 2 stoßend aneinandergelegt werden, sodann können in Querrichtung immer zwei Lauf- und Druckverteilungsplatten 2 durch Einschieben einer kürzeren Profilschiene 5 verbunden werden, während daran anschließend eine weitere Reihe Lauf- und Druckverteilungsplatten 2 aufgelegt wird, wobei nun die erste und die zweite Reihe Lauf- und Druckverteilungsplatten 2 mittels der längeren Profilschienen 5, die in die Aufnahmenuten geschoben werden, miteinander verbindbar sind.
- Es wird deutlich, daß dadurch, daß die Profilschienen 5 flächenbündig mit der Unterseite der Lauf- und Druckverteilungsplatten 2 abschließen, ein einfaches Einschieben der Profilschienen 5 möglich wird, da durch die Oberseite der Unterplatten 1 praktisch eine Führungsfläche gebildet wird.

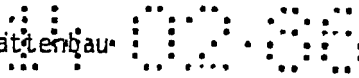
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- Auch eine an sich bekannte Verlegeweise, die Lauf- und Druckverteilungsplatten 2 reihenweise versetzt zueinander anzuordnen, wie dies besonders deutlich in der Figur 1 zu erkennen ist, verhindert in ausgezeichneter Weise ein Verrutschen oder Verschieben der Lauf- und Druckverteilungsplatten 2. Zweckmäßigerweise werden rechteckförmige Platten eingesetzt, wobei durch den Versatz bedingt im Wandanschlußbereich entsprechende Plattenzuschnitte vorgesehen sein müssen, um im vollen Umfang eine seitliche Abstützung des Sportbodenbelages an der Wand zu gewährleisten.

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Schutzansprüche

1. Demontierbarer Sportbodenbelag, bestehend aus mehreren, stoßend verlegten Unterplatten, mit jeweils einer elastischen Schicht, und auf den Unterplatten, zu deren Stoßnähten versetzt angeordneten, durch Formschlußteile lösbar miteinander verbundenen Lauf- und Druckverteilungsplatten, die in zueinander versetzten Reihen verlegt sind, wobei längere Formschlußteile in Längsrichtung und kürzere in Querrichtung verlaufen, d a d u r c h g e k e n n z e i c h n e t, daß jedes Formschlußteil aus einer Profilschiene (5) besteht, die aus zwei parallel zur Grundfläche der Lauf- und Druckverteilungsplatten (2), mit Abstand zueinander verlaufenden und durch einen Steg (8) miteinander verbundenen Flanschen (6, 7) gebildet ist, wobei an mindestens einem Flansch (7) an jeder Längskante eine Abwicklung (9) vorgesehen ist, die in Richtung des anderen Flansches (6) weist, und daß Lauf- und Druckverteilungsplatten zwei im Querschnitt entsprechende Aufnahmenuten aufweisen, in die die Profilschienen (5) einsteckbar sind.

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2. Sportbodenbelag nach Anspruch 1, dadurch gekennzeichnet, daß die Profilschiene (5) im Querschnitt um ihre vertikale Achse symmetrisch ausgebildet ist.
3. Sportbodenbelag nach Anspruch 1, dadurch gekennzeichnet, daß die der Unterplatte (1) zugewandte Außenfläche des Flansches (7) bündig mit der entsprechenden Unterseite der Lauf- und Druckverteilungsplatten (2) abschließt.

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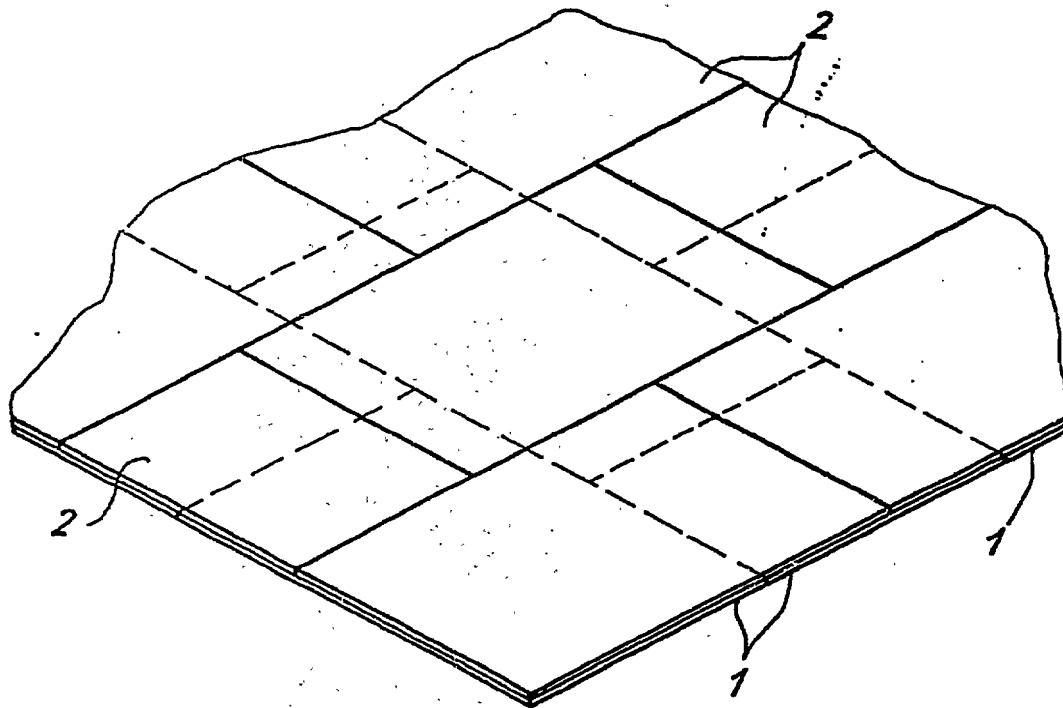


Fig. 1

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Fig. 2

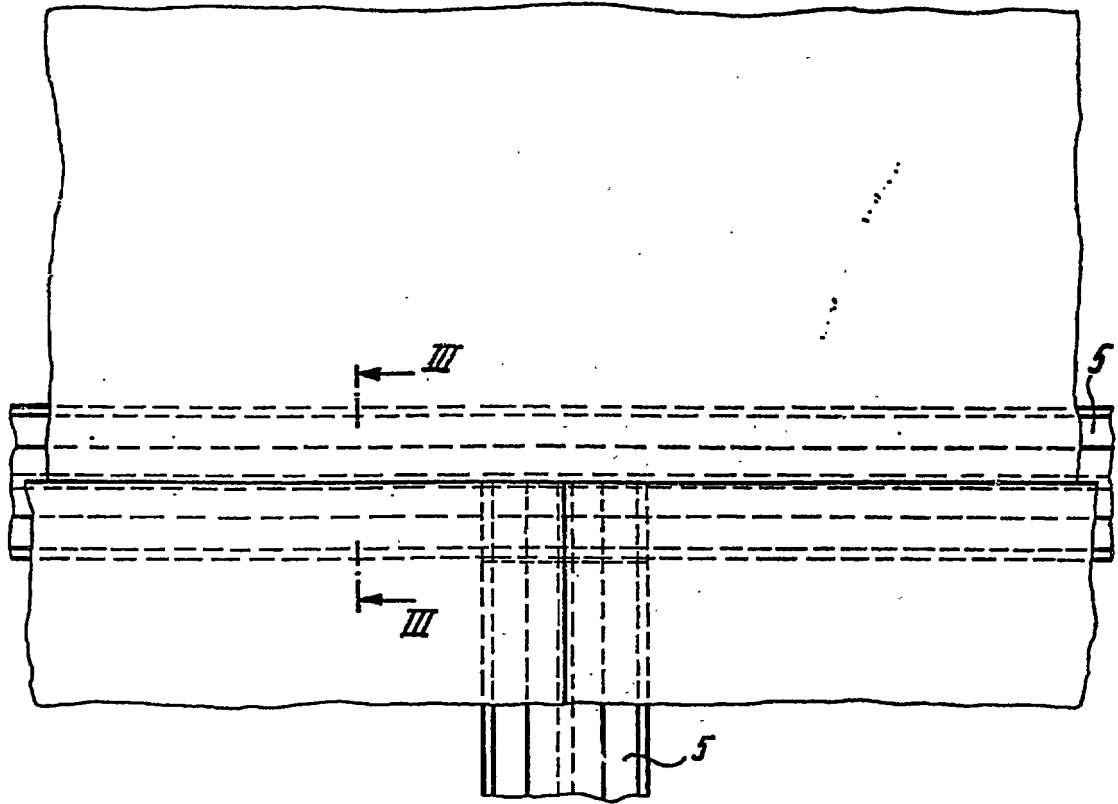
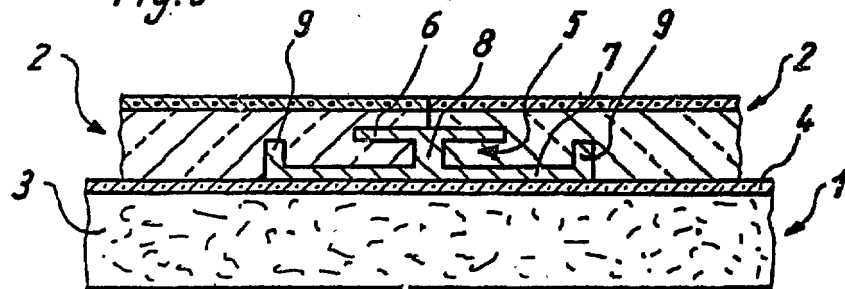


Fig. 3



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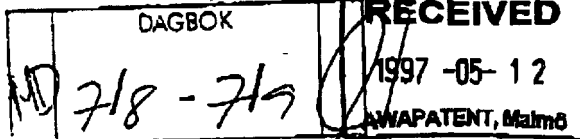
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Assistant (other matters) (0 89) 23 99- 2438

Application No./Patent No.	Ref.	Date
94915725.9-2303	2950767	U
Applicant/Proprietor		
VALINGE ALUMINIUM AB		

Communication pursuant to Article 96(2) and Rule 51(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(3) and 83(2) and (4) EPC.

Amendments to the description, claims and drawings are to be filed where appropriate within the said period in **three copies on separate sheets** (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



H. Plugge
 Primary examiner
 for the Examining Division

Enclosures: 1 page/s reasons (Form 2906)

Registered letter

EPO Form 2901 1 10 95

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**Beschheid/Protokoll (Anlage)**Datum
Date
Date**Communication/Minutes (Annex)**Blatt
Sheet 1
Feuille**Notification/Procès-verbal (Annexe)**Anmelde-Nr.:
Application No.: 94 915 725.9
Demande n°:

The examination is being carried out on the application as originally filed with the EPO, thus as published under the PCT.

- 1). With regard to the available prior art the present application meets the requirements of the EPC for patentability.

In claim 1, second to last paragraph, the definition is of a connection which allows mutual displacement of the panels in the direction of the joint edges.

The applicant is requested to confirm that this is indeed the intended limitation, rather than that the panels can move relative to each other in a direction perpendicular to the edges.

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Handled by
Sören Giver/UA

Helsingborg
26 June 1997

Our ref.
2950767

Attention
DG 2

REGISTERED MAIL

EUROPEAN PATENT OFFICE
D-80298 MÜNCHEN

European Patent Application No 94915725.9-2303
in the name of **VÄLNGE ALUMINIUM AB**

Dear Sirs,

This is in response to your Communication pursuant to Article 96(2) EPC.

It is hereby confirmed that the claim feature relating to the mutual displacement of the panels *in the direction of the joint edges* is an intended limitation. This is an essential feature of the invention, representing an important functional difference between prior-art panel connections using glue or spring clips. Contrary to the present invention, these two conventional connection types do not allow for any mutual displacement of the panels in the direction of the joint edges.

The mutual displacement of the panels in the direction of the joint edges is essential, because it makes it possible to mechanically connect not only e.g. the long edges of the panels, but also the short edges. Thus, as described in the application, when a new panel is to be connected, this is essentially performed in a two-step operation. The first step consists of connecting the new panel at its long edge to the long edge of an adjacent panel already assembled on the floor in a neighbouring row. As illustrated in the drawings, this first step can be performed by first positioning the new panel adjacent to the panel on the floor, while holding the

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new panel inclined upwards. Then, the new panel is turned downwards into contact with the floor. The first step of the two-step operation is then completed. The second step of the operation consists of mechanically connecting one end edge of the new panel with an adjacent end edge of a previously laid panel in the same row. This is done by displacing the new panel along its long edge, in relation to the adjacent panel in the neighbouring row. Thereby, the two end edges can be brought together and be mechanically connected to each other as disclosed in the application. Accordingly, the mutual displacement of the panels in the direction of the joint edges is an essential feature of the invention and makes it possible to perform the above second step of the assembly operation.

However, the limitation in the preceding paragraph of claim 1 - that the panels, when joined together, can occupy a relative position in said second direction where a play exists between the locking groove and the locking surface of the locking element - was introduced into claim 1 mainly in order to distinguish the invention from prior-art spring clips, where the spring clips are biased towards the panel material in grooves provided in the lower side of the panels. The prosecution of the present application clearly indicating that the combination of the remaining features in claim 1 is both novel and inventive over the prior art, it is hereby requested, as a primary request, that the application be granted based on the enclosed new claims 1-20 with the heading "New claims - primary request". Claim 1 according to the primary request does not comprise the above limitation regarding the play. It is submitted that this amendment does not contravene Article 123(2) EPC.

As a secondary request, in case the claims according to the primary request cannot be granted, the claims should be amended in accordance with the enclosed amended claims 1-20 with the heading "New claims - secondary request".

In the new claims, according to the primary as well as the secondary request, a new claim 14 has been introduced, dependent from any one of claims 1-4. According to new claim 14, the strip is *integrally formed* with the strip panel, i.e. made in one piece with the strip panel. This embodiment according to new claim 14 is disclosed in fig. 5 and is an alternative to the embodiment according to claim 5, wherein the strip is made of a material different from that of the strip panel and fixedly mounted on the strip panel at the factory. The support for new claim 14 can be found in the application on page 12, lines 23 and 24 ("alternatively, the strip 6 may be integrally formed with the strip panel 1") and on page 17, line 34 to page 18, line 2

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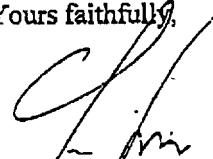


("in the embodiment of fig 5, the strip 6 and its locking element 8 are integrally formed with the strip panel 1, the projecting part of the strip 6 thus forming an extension of the lower part of the joint edge 3"). The cross-section of the embodiment disclosed in fig 5 clearly indicates that the strip 6 is made in one piece with the panel 1. }

Moreover, new claims 10 and 11 according to the primary and secondary requests have been corrected, such that these claims now correctly are dependent from claim 9 instead of claim 6. Claims 10 and 11 are directed to limitations on a mechanical connection defined in claim 9.

Referring to our letter of 10 March 1997, an accelerated processing of the application under the PACE-program is hereby respectfully requested.

Yours faithfully,



Authorised Representative
AWAPATENT AB
Sören Giver

Encls

New claims 1-20 according to the primary request, in triplicate

New claims 1-20 according to the secondary request, in triplicate

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NEW CLAIMS - PRIMARY REQUEST

1. A system for providing a joint along adjacent
5 joint edges (3, 4) of two building panels (1, 2), especially floor panels, in which joint:

the adjacent joint edges (3, 4) together form a first mechanical connection locking the joint edges (3, 4) to each other in a first direction (D1) at right angles to the principal plane of the panels (1, 2), and
10 a locking device (6, 8, 14) arranged on the rear side (18, 16) of the panels (1, 2) forms a second mechanical connection locking the panels (1, 2) to each other in a second direction (D2) parallel to the principal
15 plane and at right angles to the joint edges (3, 4), said locking device (6, 8, 14) comprising a locking groove (14) which extends parallel to and spaced from the joint edge (4) of one (2) of said panels, termed groove panel, and which is open at the rear side (16) of the groove
20 panel (2), characterised in

that the locking device (6, 8, 14) further comprises a strip (6) integrated with the other (1) of said panels, termed strip panel, said strip (6) extending throughout substantially the entire length of the joint edge (3) of
25 the strip panel (1) and being provided with a locking element (8) projecting from the strip, such that when the panels are joined together, the strip (6) projects on the rear side of the groove panel (2) with its locking element (8) received in the locking groove (14) of the
30 groove panel (2),

that the first and the second mechanical connection both allow mutual displacement of the panels (1, 2) in the direction of the joint edges (3, 4), and

that the second mechanical connection is so conceived as to allow the locking element (8) to leave the lock-
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ing groove (14) if the groove panel (2) is turned about its joint edge (4) angularly away from the strip (6).

2. A system as claimed in claim 1, characterised in that when the groove panel (2) is pressed against the strip panel (1) in said second direction (D2) and is turned angularly away from the strip (6), the maximum distance between the axis of rotation of the groove panel (2) and the locking surface of the locking groove (14) closest to the joint edges is such that the locking element (8) can leave the locking groove (14) without contacting the locking surface of the locking groove (14).

3. A system as claimed in claim 1 or 2, characterised in that the locking surface (10) of the locking element (8) is extended from the front side (22) of the strip (6) through a height in said first direction that is less than or equal to 2 mm.

4. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection is provided by the joint edge (4) of the groove panel (2) engaging, in said first direction, between the joint edge (3) of the strip panel (1) and the front side of the strip (6).

5. A system as claimed in any one of the preceding claims, characterised in that the strip (6) integrated with the strip panel (1) is made of a material different from that of the strip panel (1) and fixedly mounted on the strip panel (1) at the factory.

6. A system as claimed in claim 5, characterised in that the strip (6), at least for one of the two panels (1, 2), is received in a countersunk groove (40; 42) in the rear side (18; 16) of this one panel (1; 2).

7. A system as claimed in claim 5 or 6, characterised in

that the strip (6) is mounted in an equalising groove (40) which is countersunk in the rear side (18) of

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the strip panel (1) and exhibits an exact, predetermined distance (E) from its bottom to the front side (21) of the strip panel (1),

that the part of the strip (6) projecting behind the groove panel (2) engages a corresponding equalising groove (42) which is countersunk in the rear side (16) of the groove panel (2) and which exhibits the same exact, predetermined distance (E) from its bottom to the front side (26) of the groove panel (2), and

that the strip (6) has at least such a thickness that the rear side (44) of the strip is flush with the rear sides (18, 16) of the panels.

8. A system as claimed in claim 7, characterised in that the strip (6) has such a thickness that it is only partly received in the equalising grooves (40, 42).

9. A system as claimed in any one of claims 5-8, characterised in that the strip (6) is fixed to the strip panel (1) by means of a mechanical connection.

10. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a gripping edge (52) defined by two recesses (24, 50) in the rear side (18) of the strip panel, and tongues, lips or the like (54, 56) which are bent or punched from the strip (6) and which press against opposite outer sides of the gripping edge (52).

11. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a recess (58) in the rear side (18) of the strip panel, and tongues, lips or the like (60) which are bent or punched from the strip (6) and which press against opposing inner sides of the recess (58).

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12. A system as claimed in any one of claims 5-11, characterised in that the strip (6) is fixed to the strip panel (1) by means of a binder.

13. A system as claimed in any one of claims 5-12, characterised in that the strip (6) is made of a flexible, preferably resilient material, such as sheet aluminium.

14. A system as claimed in any one of claims 1-4, characterised in that the strip (6) is integrally formed with the strip panel (1), i.e. made in one piece with the strip panel (1).

15. A system as claimed in any one of the preceding claims, characterised in that the locking element (8) consists of a locking edge extended continuously along the strip (6).

16. A system as claimed in any one of claims 1-14, characterised in that the locking element (8) consists of a plurality of spaced-apart locking elements distributed throughout the length of the strip (6).

17. A system as claimed in any one of the preceding claims, characterised in that the panels (1, 2) are rectangular and intended, at each of their four edges (3, 4, 3', 4'), to be joined to a similar panel by a first mechanical connection of the aforementioned type and a second mechanical connection of the aforementioned type, each panel having a first pair of opposite joint edges (3, 4), one of which is provided with a strip (6) of the aforementioned type and the other of which is provided with a locking groove (14) of the aforementioned type, and a second pair of opposite joint edges (3', 4'), one of which is provided with a strip (6') of the aforementioned type and the other of which is provided with a locking groove (14') of the aforementioned type.

18. A system as claimed in any one of the preceding claims, characterised in that an underlay (46) of floor boards, foam, felt or the like is fixed to the rear sides (18, 16) of the panels.

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19. A system as claimed in claim 18, characterised in that the underlay (46) is fixed so as to cover the strip (6) in said second direction at least up to the locking element (8), such that a joint between the underlays (46) of the two adjacent panels is offset in said second direction relative to the joint edges (3, 4).

20. A system as claimed in any one of the preceding claims, characterised in that a sealing means, such as a sealing compound, a rubber strip or the like, is provided on the front side (22) of the strip between the locking element (8) and the joint edge (3) of the strip panel to seal against the groove panel (2).

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~~NEW CLAIMS SECONDARY REQUEST~~

1. A system for providing a joint along adjacent
5 joint edges (3, 4) of two building panels (1, 2), especially floor panels, in which joint:

the adjacent joint edges (3, 4) together form a first mechanical connection locking the joint edges (3, 4) to each other in a first direction (D1) at right angles to the principal plane of the panels (1, 2), and
10 a locking device (6, 8, 14) arranged on the rear side (18, 16) of the panels (1, 2) forms a second mechanical connection locking the panels (1, 2) to each other in a second direction (D2) parallel to the principal
15 plane and at right angles to the joint edges (3, 4), said locking device (6, 8, 14) comprising a locking groove (14) which extends parallel to and spaced from the joint edge (4) of one (2) of said panels, termed groove panel, and which is open at the rear side (16) of the groove
20 panel (2), characterised in

that the locking device (6, 8, 14) further comprises a strip (6) integrated with the other (1) of said panels, termed strip panel, said strip (6) extending throughout substantially the entire length of the joint edge (3) of
25 the strip panel (1) and being provided with a locking element (8) projecting from the strip, such that when the panels are joined together, the strip (6) projects on the rear side of the groove panel (2) with its locking element (8) received in the locking groove (14) of the
30 groove panel (2),

that the panels, when joined together, can occupy a relative position in said second direction (D2) where a play (Δ) exists between the locking groove (14) and a locking surface (10) on the locking element (8) that is
35 facing the joint edges and is operative in said second mechanical connection,

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that the first and the second mechanical connection both allow mutual displacement of the panels (1, 2) in the direction of the joint edges (3, 4), and

that the second mechanical connection is so conceived as to allow the locking element (8) to leave the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly away from the strip (6).

2. A system as claimed in claim 1, characterised in that when the groove panel (2) is pressed against the strip panel (1) in said second direction (D2) and is turned angularly away from the strip (6), the maximum distance between the axis of rotation of the groove panel (2) and the locking surface of the locking groove (14) closest to the joint edges is such that the locking element (8) can leave the locking groove (14) without contacting the locking surface of the locking groove (14).

3. A system as claimed in claim 1 or 2, characterised in that the locking surface (10) of the locking element (8) is extended from the front side (22) of the strip (6) through a height in said first direction that is less than or equal to 2 mm.

4. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection is provided by the joint edge (4) of the groove panel (2) engaging, in said first direction, between the joint edge (3) of the strip panel (1) and the front side of the strip (6).

5. A system as claimed in any one of the preceding claims, characterised in that the strip (6) integrated with the strip panel (1) is made of a material different from that of the strip panel (1) and fixedly mounted on the strip panel (1) at the factory.

6. A system as claimed in claim 5, characterised in that the strip (6), at least for one of the two panels (1, 2), is received in a countersunk

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groove (40; 42) in the rear side (18; 16) of this one panel (1; 2).

7. A system as claimed in claim 5 or 6, characterised in

5 that the strip (6) is mounted in an equalising groove (40) which is countersunk in the rear side (18) of the strip panel (1) and exhibits an exact, predetermined distance (E) from its bottom to the front side (21) of the strip panel (1),

10 that the part of the strip (6) projecting behind the groove panel (2) engages a corresponding equalising groove (42) which is countersunk in the rear side (16) of the groove panel (2) and which exhibits the same exact, predetermined distance (E) from its bottom to the front
15 side (26) of the groove panel (2), and

that the strip (6) has at least such a thickness that the rear side (44) of the strip is flush with the rear sides (18, 16) of the panels.

8. A system as claimed in claim 7, characterised
20 terised in that the strip (6) has such a thickness that it is only partly received in the equalising grooves (40, 42).

9. A system as claimed in any one of claims 5-8, characterised in that the strip (6) is fixed
25 to the strip panel (1) by means of a mechanical connection.

10. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a gripping edge (52) defined by two recesses (24, 50) in the
30 rear side (18) of the strip panel, and tongues, lips or the like (54, 56) which are bent or punched from the strip (6) and which press against opposite outer sides of the gripping edge (52).

35 11. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a recess

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(58) in the rear side (18) of the strip panel, and tongues, lips or the like (60) which are bent or punched from the strip (6) and which press against opposing inner sides of the recess (58).

5 12. A system as claimed in any one of claims 5-11, characterised in that the strip (6) is fixed to the strip panel (1) by means of a binder.

13. A system as claimed in any one of claims 5-12, characterised in that the strip (6) is made of
10 a flexible, preferably resilient material, such as sheet aluminium.

14. A system as claimed in any one of claims 1-4, characterised in that the strip (6) is integrally formed with the strip panel (1), i.e. made in
15 one piece with the strip panel (1).

15. A system as claimed in any one of the preceding claims, characterised in that the locking element (8) consists of a locking edge extended continuously along the strip (6).

20 16. A system as claimed in any one of claims 1-14, characterised in that the locking element (8) consists of a plurality of spaced-apart locking elements distributed throughout the length of the strip (6).

17. A system as claimed in any one of the preceding
25 claims, characterised in that the panels (1, 2) are rectangular and intended, at each of their four edges (3, 4, 3', 4'), to be joined to a similar panel by a first mechanical connection of the aforementioned type and a second mechanical connection of the aforementioned
30 type, each panel having a first pair of opposite joint edges (3, 4), one of which is provided with a strip (6) of the aforementioned type and the other of which is provided with a locking groove (14) of the aforementioned
type, and a second pair of opposite joint edges (3', 4'),
35 one of which is provided with a strip (6') of the aforementioned type and the other of which is provided with a locking groove (14') of the aforementioned type.

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18. A system as claimed in any one of the preceding claims, characterised in that an underlay (46) of floor boards, foam, felt or the like is fixed to the rear sides (18, 16) of the panels.

5 19. A system as claimed in claim 18, characterised in that the underlay (46) is fixed so as to cover the strip (6) in said second direction at least up to the locking element (8), such that a joint between the underlays (46) of the two adjacent panels is offset in
10 said second direction relative to the joint edges (3, 4).

20. A system as claimed in any one of the preceding claims, characterised in that a sealing means, such as a sealing compound, a rubber strip or the like, is provided on the front side (22) of the strip between the locking element (8) and the joint edge (3)
15 of the strip panel to seal against the groove panel (2).

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1997 -10- 27

AWAPATENT, Malmö

Datum/Date

24. 10. 97

Anm./Ref./Réf. 2950767	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 94915725.9-2303/0698162
Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire VALINGE ALUMINIUM AB	

COMMUNICATION PURSUANT TO ARTICLE 115(2) EPC

Please find enclosed observations by a third party concerning the
 patentability of the invention of the above-mentioned patent applica-
 tion. That person is not a party to the proceedings before the EPO
 (Art. 115(1) EPC).

Under Article 115(2) EPC you may comment on the observations.

Formalities Officer

Tel. No. 089/2399 - 2449

Françoise Ide

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O/V R/W A.13586
GV/sr

confirmation copy

7 October 1997

Dear Sirs,

2303

re: European patent application no 94915725 (Publ.No 0.698.162).
in the name of : VALINGE ALUMINIUM AB.Under article 115 EPC, we present following observations, regarding the
above mentioned application.In the reply of the applicant dated 26 June 1997, (in response to the
first examination report of 7 May 1997) the applicant filed a primary
and a secondary request of new claims.Claim 1 of the primary request, the scope of which is larger than the
scope of the originally filed claim 1, is based on the assertion by the
applicant that the feature that two panels engaged into each other can
mutually be displaced in their longitudinal direction is new (citation:
"... the mutual displacement of the panels in the direction of the
joint edges is an essential feature of the invention...").We would like to draw the Examiner's attention to the fact that the
feature that the panels can be mutually displaced in longitudinal
direction, is common technology for as long as flooring panels
(provided with tongue and groove) exist.TEL. (03) 225 00 60 (4L.) • FAX (03) 233 71 62 • TELEX 32 679 • TELEGR.: PATENTBUREAU-ANTWERPEN • M.R.A.R.C.A. 25 541 • BTW-TVA BE 400.826.946
BANKEN-BANQUES: BBL 330-0007538-42 • KB 409-0513001-77 • CL 610-0023220-31 • PCR-CCP 000-0278285-05Wij slaan borg voor de juistheid van de informatie van de aanvraag van de aanvraag. Het is niet mogelijk om de juistheid van de informatie te garanderen.
Nous garantissons le maximum de soins apportés aux travaux d'investigation et d'avis. Nous ne pouvons donc être tenus responsables que pour les erreurs matérielles.

2.

Indeed, as shown in enclosure 1, when engaging a flooring panel A with already installed flooring panels B and C, the flooring panel A is first coupled to the flooring panels B (tongue and groove are coupled), and subsequently the flooring panel A, in coupled condition, is moved to flooring panel C, as shown by arrow F, e.g. by exerting a force on the end E by means of a hammer.

It is clear that in practice it is never possible to couple flooring panel A to flooring panel B directly from the beginning closely to the flooring panel C.

It is clear that this technique already exists as long as flooring panels exist which are provided with tongue and groove.

*
* *

Also the document WO 93/13280, which was cited in the search report of the abovesaid European patent application, clearly discloses panels which in coupled condition can be mutually displaced in longitudinal direction. Indeed, as shown in the drawings and as described in the text of WO 93/13280, the legs 2-3 fit into "SLOTS" 14-15, which means that there is no obstruction which can hinder a mutual displacement of two coupled panels in the longitudinal direction. Indeed, when for example exerting a force in longitudinal direction on the panel 13, this panel 13 will be displaced in that direction, whereby it is sliding with the slot 15 over the leg 3.

That a mutual displacement between the two panels of JUNCKERS (WO 93/13280) MUST be possible is also clear when taking in account their commercialised product. Hereto we enclose photographs of this product (photographs 1 to 5 of enclosure 2), as well as drawings (enclosures 3 and 4) which are prepared from enlargements of photographs 1 and 2.

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3.

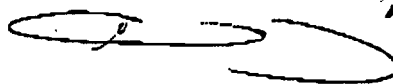
From this commercialised product, it is clear that the flooring panels of JUNCKERS are provided with tongue and groove at the longitudinal edges as well as at the short edges. As tongues and grooves are provided at both, longitudinal and short edges, it is clear that the panels of JUNCKERS can only be coupled to each other by first engaging the longitudinal edges of two adjacent panels and subsequently displacing the last coupled panel in longitudinal direction, in order to obtain that also the coupling at the shorter edges becomes realised. It is clear that the coupling of the panels at the short edges should not be possible when the panels cannot be moved in longitudinal direction.

It should also be noted that, after having provided the flooring board of JUNCKERS with a plate-shaped body 1 as disclosed in WO 93/13280. (see also photograph 1), a structure is obtained which shows all features of claim 1 of the primary request.

For the reasons explained above, we are of the opinion that at least claim 1 of the primary request does not fulfill the requirements of article 54 EPC.

It is respectfully requested that the Examiner handling the European patent application no 94915725 should take in consideration the above comments.

Yours faithfully.

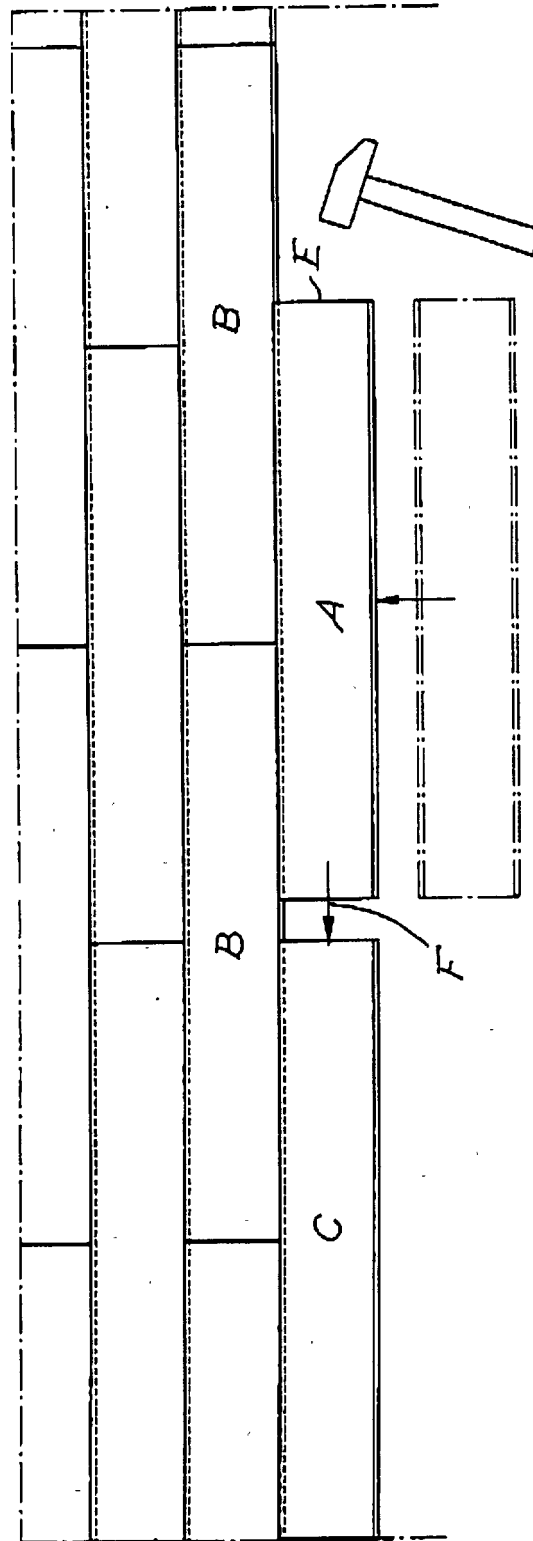


2.0. E. Donné M.Sc.
European Patent Attorney

Encl.

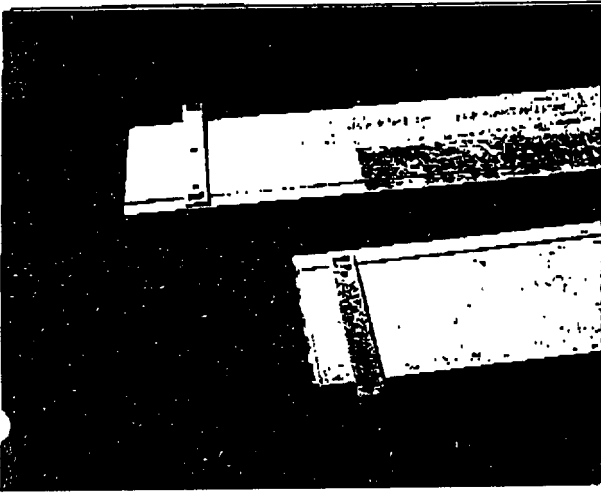
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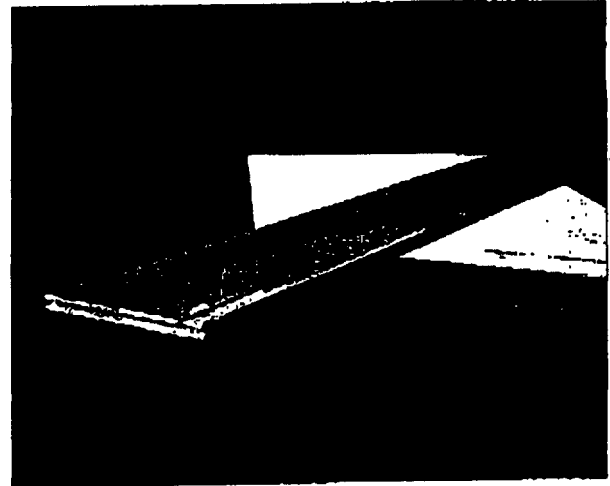


ENCLOSURE 2

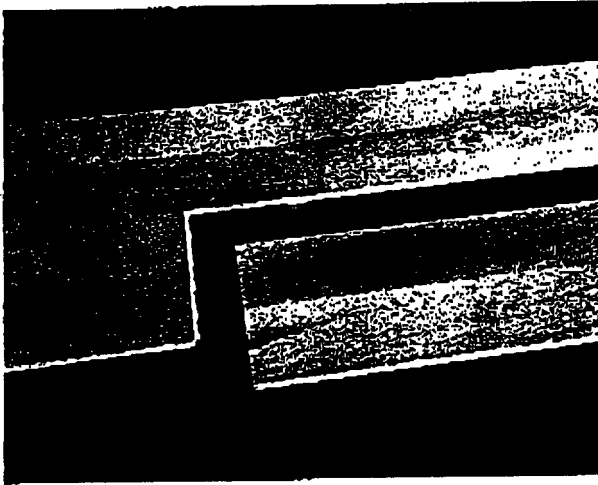
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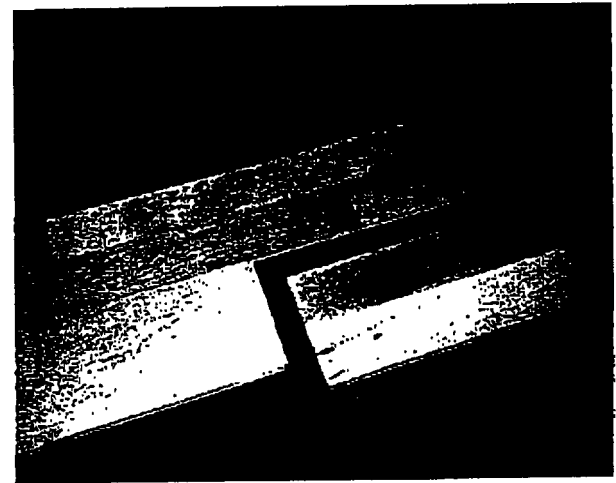
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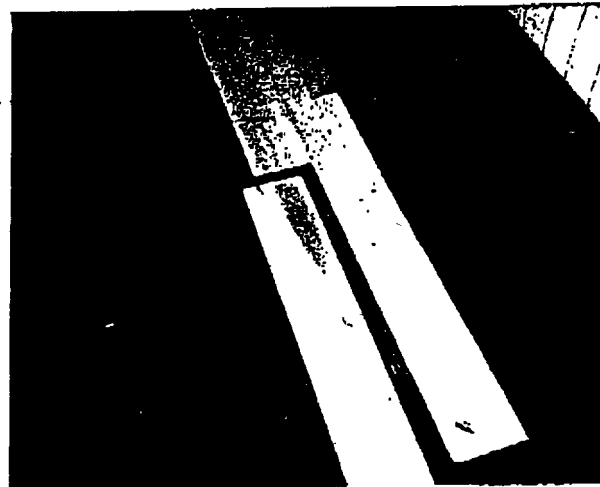
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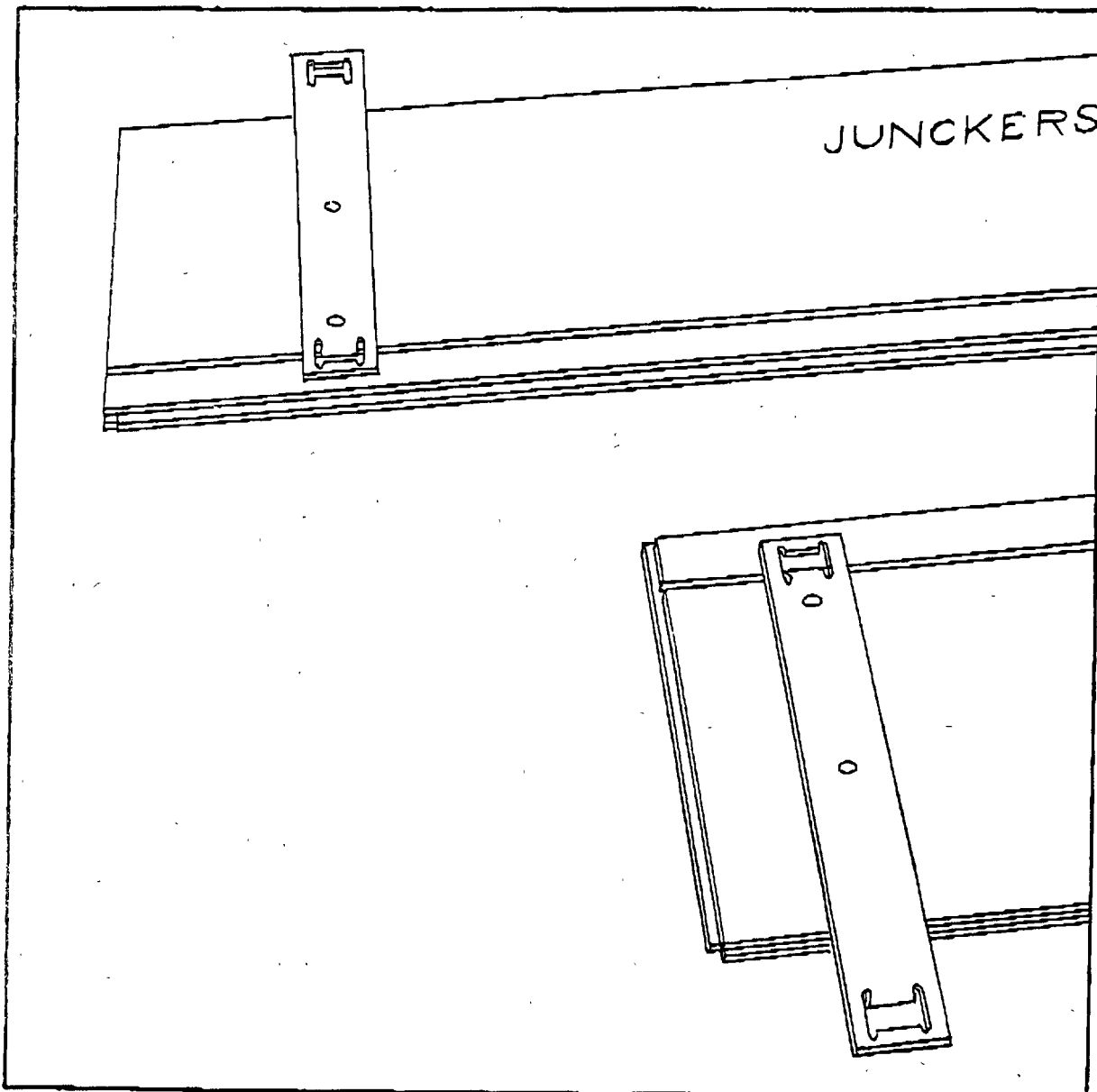
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ENCLOSURE 3

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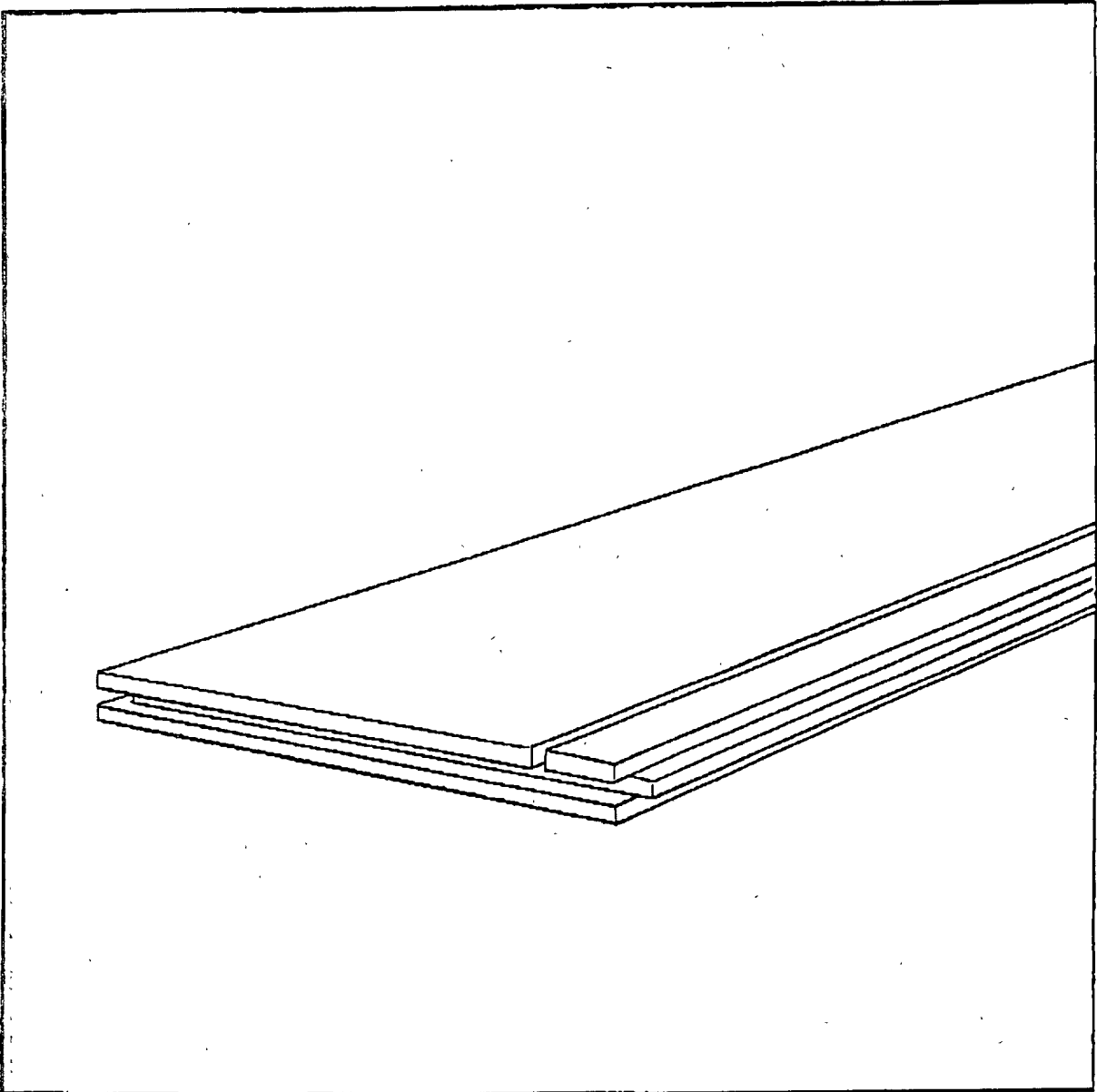
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ENCLOSURE 4

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Telephone Numbers:

Primary Examiner (substantive examination) (089) 2399-2466

Formalities Officer / Assistant (Formalities and other matters) (089) 2399-2436



Application No.
94 915 725.9-2303

Ref.
2950767

Date
31. 10. 97

Applicant
VALINGE ALUMINIUM AB

Communication pursuant to Article 96(2) and Rule 51(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(3) and 83(2) and (4) EPC.

Amendments to the description, claims and drawings are to be filed where appropriate within the said period in three copies on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



PLUGGE H B
Primary Examiner
for the Examining Division

Enclosure(s): 2 page/s reasons (Form 2906)

Registered Letter

EPO form 2001 10.96CSX


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	Bescheid/Protokoll (Anlage)	Communication/Minutes (Annex)	Notification/Procès-verbal (Annexe)
	Datum Date 31.10.97	Blatt Sheet Feuille 1	Anmelde-Nr.: Application No.: Demande n°: 94 915 725.9

The examination is being carried out on the following application documents:

Text for the Contracting States:

AT BE CH LI DE DK ES FR GB GR IE IT LU MC NL PT SE

Description, pages:

1-19 as published

Claims, No.:

1-20 as received on 01.07.1997 with letter of 26.06.1997

Drawings, sheets:

1-6 as published

Comments:

*** Main request; and claims 1 to 20 of secondary request**

1. The amendments filed with the letter dated 26.06.1997 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 123(2) EPC. The amendment concerned is the deletion of an essential feature of claim 1.

In the originally filed claim 1, it was stated that the panels, when joined together, have play so as to be able to occupy a relative position in the "second" direction.

This feature characterised claim 1 over the closest prior art, SE-A-450 141.

The deletion of this feature contravenes Article 123(2) EPC, as there is no disclosure in the originally filed application that this feature is not an essential feature. It is consistently presented as an essential feature.

Furthermore, by deleting this feature, the subject matter of claim 1 appears to no longer support an inventive step.

Claim 1, according to the primary request, is differentiated from said closest prior art simply in that the strip extends "throughout substantially the entire length of the

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Bescheld/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

Datum
Date
Date

31.10.97

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Feuille

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Anmelde-Nr.:
Application No.:
Demande n°:

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joint edge".

Such a feature must be considered banal. The skilled man is familiar with fastening systems. The provision of strip fasteners is generally known, with established advantages over discontinuous fasteners (or point fasteners), and he would as a matter of course replace a point fastener with a longitudinally extending fastener where necessary.

For the above reasons, claim 1 of the primary request is not allowable.

2. The insertion of new claim 14 does not appear to present any conflict with Article 123(2) of the EPC, as there is support in the originally filing for the subject matter described therein.
3. The set of claims according to the secondary request appear to meet the requirements for patentability. However, although claim 1 is drafted in the two-part form, many of the features in the characterising portion are disclosed in document SE-A-450 141 in combination with the features disclosed in the preamble.

These features should be transferred from the characterising portion of the claim to the preamble.

In particular the following feature need to transferred to the preamble:

- The entire first paragraph of the characterising portion - except for the statement that "said strip extends throughout substantially the entire length of the panel,
- The last two paragraphs of the characterising portion of claim 1.

4. The applicant is requested to file amended claims as set out above, based on the secondary request. When these have been received the application can proceed to grant.

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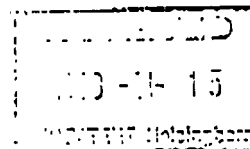
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1998 -01- 14

AWAPATENT, Malmö



Datum/Date

12. 01. 98

Zeichen/Ref./Réf. 2950767	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 94915725.9-2303/0698162
Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire VALINGE ALUMINIUM AB	

COMMUNICATION PURSUANT TO ARTICLE 115(2) EPC

Please find enclosed observations by a third party concerning the patentability of the invention of the above-mentioned patent application. That person is not a party to the proceedings before the EPO (Art. 115(1) EPC).

Under Article 115(2) EPC you may comment on the observations.

Formalities Officer

Tel. No. 089/2399 - 2449

F. Ide
Françoise Ide

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D-80298

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DUITSLAND

U/V Ref.:

O/N Ref. A.135-66
GV/ec

confirmation copy

19 December 1997

Dear Sirs,

re: European patent application No 94915725.9 (Publ.No. 0.698.162)
in the name of: VALINGE ALUMINIUM AB. 2303Under article 115 EPC, we wish to file following observations,
regarding the above mentioned European patent application.*
* *Claim 1 :With respect to claim 1 ("second request") we would like to draw the
attention of the Examiner to the prior-art document GB 2.256.023, of
which we enclose herewith a copy. We also enclose an additional copy of
figures 4 and 5 of this document, on which several indications have
been made.First of all, GB 2.256.023, page 1, second paragraph, discloses a joint
which can be used for flooring. Consequently, this document clearly
relates to the same technical field as the European patent application
No. 94915725.9.

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TEL. (03) 225 00 60 (4L) • FAX (03) 225 71 62 • TELEX 32 678 • TELEGR.: PATENTBURO-ANTWERPEN • N.R.A.R.C.A. 25 541 • BTWIVA BE 400.526.955
BANKEN-BANQUES BBL 320-0007538-42 • KB 409-6513001-77 • CL 610-0023220-31 • PCA-CCP 000-0278395-05Wij aanvaarden de grootste zorg omtrent de levering van de geleverde diensten. Nooagewoogen zijn wij dus alleen aansprakelijk in geval van niet-afgeleverde diensten.
Nous garantissons le maximum de soins apportés aux travaux d'investigation et de service. Nous ne pouvons donc être tenus responsables que pour les erreurs matérielles.

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Secondly, it is clear that the joint disclosed in GB 2.256.023 also provides in first and second mechanical connections as claimed in the European patent application No. 94915725.9.

More particularly, as indicated on the enclosed copy of figure 4, the joint of GB 2.256.023 discloses the use of a strip S, which projects on the rear side of a second panel 1' and which is provided with a locking element L (formed by side edge 17b), whereby this locking element is received in a locking groove G at the rear side of said panel 1'. Hereby the locking groove G consists in the recess bordered by the rib 10, on the one hand, and the lower side edge face 11b, on the other hand.

Furthermore, the panels 1 and 1', when joined together, can also occupy a relative position in the direction D2, similar as in the European patent application No. 94915725. More particularly, as indicated on the enclosed additional copy of figures 4 and 5, the joint of GB 2.256.023 clearly shows the "play" claimed in claim 1 of the "second request".

From the aforesaid, it is clear that all features of claim 1 are known from the British patent No. 2.256.023 and consequently the subject-matter of this claim is not new.

*
* * *

With respect to the dependent claims of EP 94915725.9 we would like to draw the attention of the Examiner to the above-mentioned British patent No. 2.256.023, as well as to following documents:

US 3.310.919
US 3.694.983
US 3.859.000
GB 424.057
GB 1.430.423
GB 2.117.813
DE 2.502.992
DE 3.041.781
CH 200.949
FR 2.568.295
WO 9.313.280

Copies of the abstracts and/or most relevant pages of the above-listed documents are enclosed.

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Claim 2:

From figure 4 of GB 2.256.023 one can clearly see that when two panels are pressed against each other and when subsequently panel 1' is turned angularly away from the strip S, the locking element can leave the locking groove G without contacting the locking surface 17b.

Consequently, for this reason, also the subject-matter of claim 2 is not new.

Claim 3:

As normally, panels as shown in GB 2.256.023 have a thickness which varies between approximately 8 mm and 2 cm, it is clear that the locking surface 17b is smaller than 2 mm. For this reason also claim 3 is anticipated by GB 2.256.023.

Claim 4:

GB 2.256.023 discloses that the first mechanical connection is provided by a joint edge (tongue 5) of the first panel, which is engaged between the joint edge (upper lip above groove 6) and the front side of the strip S of the second panel. Therefore we believe that the subject-matter of claim 4 is not new.

Claim 5:

The features of claim 5 that the strip is made of a material different from that of the panel and is fixedly mounted on the panel, are obvious taking into account that flooring panels provided with coupling strips of a material which differs from the material of the panel are already known from US 3.310.919, US 3.694.983 and US 3.859.000.

The feature of claim 5 can also be found in GB 2.117.813. As can be seen in the drawings of this document, the strips 12 and 13 are made of a different material than the plate 11. GB 2.117.813 relates to a wall panel. As the European patent application 94915725.9 relates to building panels, which means wall panels as well as flooring panels, GB 2.117.813 is in the same technical field.

Claim 6:

The feature of claim 6 that such strip 6 is received in a countersunk groove is also obvious, taking into account that the strips disclosed

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in US 3.310.919, US 3.694.983 and US 3.859.000 show also parts which are countersunk in the lower side of the panel.

Claim 9 :

The feature of claim 9 that the strip 6 is fixed to the strip panel 1 by means of a mechanical connection is also known of the above said three American patents, namely US 3.310.919, US 3.694.983 and US 3.859.000, as the strips are also fixedly mounted to the panels.

Claims 10 and 11 :

Using lips or the like which are bent or punched in order to realise a mechanical connection is a technique which is generally known for connecting elements to each other. The use of this technique in flooring panels is within the reach of persons skilled in the art.

According our opinion, therefore claims 10 and 11 are not inventive.

Claim 12 :

Using a binder for connecting two parts to each other, in our opinion, offers no inventive step.

Claim 13 :

The feature of claim 13, stating that the strip is made of a flexible, preferably resilient material, such as sheet aluminium, is also obvious, as according to US 3.859.000 the strips are also made of a metallic material.

Claim 14 :

The feature that the strip 6 is integrally formed with the strip panel 1 is clearly known from the already mentioned document GB 2.256.023, and consequently is not new.

Furthermore the use of strips for coupling flooring panels, these strips being integral with the flooring panels, is generally known from GB 1.430.423, DE 25 02 992, CH 200.949, FR 2.568.295, DE 3.041.781 and GB 424.057.

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Claim 15 :

The feature that the locking element consists in a locking edge extending continuously along the strip 6 is not new in view of the joint disclosed in GB 2.256.023. In the latter the locking edge is formed by edge 17b.

Furthermore, the use of continuous locking edges in flooring panels are generally known from GB 1.430.423, DE 25 02 992, CH 200.949, FR 2.568.295, DE 3.041.781 and GB 424.057.

Claim 16 :

The use of spaced apart locking elements is obvious taking in account the teachings of document WO 9313280 (cited in the international search report of the application in question). This document clearly shows that spaced apart elements can be used to couple flooring panels.

Claim 17 :

Claim 17 in fact states that each of the four edges of the panel is provided with a coupling element of the claimed coupling system.

This feature is obvious and not inventive, taking into account that it is generally known to provide flooring panels at each of the four edges with coupling means. Hereto we refer to the drawings of the panels disclosed in GB 424.057, FR 2.568.295 and CH 200.949.

Claim 18 :

The feature to fix an underlay to the rear side of the panel is known of FR 2.568.295. Figure 3 clearly shows the use of such underlay 44.

Claim 19 :

The feature of claim 19, stating that the underlay is fixed so as to cover this strip at least up to the locking element 8 is clearly anticipated by figure 3 of FR 2.568.295. In this figure 3, it can clearly be seen that the underlay 44 covers this strip up to the locking element (languette 31).

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6.

Claim 20 :

The use of a sealing strip is not inventive, as the use of a similar strip is already known from document GB 2.117.813 (beads 30 and 31).

*
* * *

It is respectfully requested that the Examiner handling the European patent application No 94915725.9 should take in consideration the above comments.

Yours faithfully.



E. Donné M.Sc.
European Patent Attorney

Encl.: 46 numbered pages.

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AWAPATENT

Helsingborg
23 February 1998

Our ref.
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(6)

Handled by
Sören Giver

Attention
DG 2

REGISTERED LETTER
EUROPEAN PATENT OFFICE
D-80298 MÜNCHEN

SENT BY TELECOPIER

European Patent Application No 94915725.9-2303
in the name of VÄLINGE ALUMINIUM AB

Dear Sirs,

This is in response to your Communication pursuant to Article 96(2), dated 21 October 1997.

Regarding section No. 1 in the Communication, the applicant's main request has been rejected as violating Article 123(2) by the deletion of an essential feature from claim 1. Although the applicant still is of the opinion that the paragraph in question, which was present in claim 1 as filed but which was deleted in claim 1 according to the main request, could be deleted from the claim without adding new matter, it is hereby requested that the application should be proceeded with based on claims 1-20 according to the secondary request submitted with the letter dated 26 June 1997. A fresh copy of these claims in triplicate is hereby enclosed.

However, it should be noted that what is stated in the second paragraph under section No. 1 in the Communication is not correct. In this paragraph the following is stated: "*In the original filed claim 1, it was stated that the panels, when joined together, have (emphasis added) a play so as to be able to occupy a relative position in the "second" direction.*". This statement is not correct in the opinion of the applicant. Originally filed claim 1 states that "*the panels,*

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when joined together, can (emphasis added) occupy a relative position in said second direction (D2) where a play (Δ) exists between".

Thus, in the application as filed, it is expressly stated that the panels can be brought into a relative position in the D2 direction where a play exists. By this definition in claim 1 as filed, the inventive locking system was further distinguished from prior-art locking systems using spring clips, since such prior-art panels cannot be brought into a relative position where such a play exists. However, the above-identified statement in claim 1 as filed - the statement that the panels can be brought into a relative position where a play exists - is not equivalent to the statement in the Communication saying that a play is always present.

Furthermore, claim 1 according to the main request (i.e. claim 1 not including the definition of the play) has also been rejected in the Communication as defining an invention which is obvious in view of SE-A-450 141. This ground for rejection is based on the assumption that the invention according to claim 1 of the primary request is differentiated from the closest prior art simply in that the strip extends throughout substantially the entire length of the joint edge. As will be discussed in the following, this assumption is not correct according to the applicant, since the invention as defined in claim 1 differs also in other respects from the closest prior art. Therefore, the invention according to claim 1 presents an inventive step over said closest prior art, even without the presence of the definition of the play.

Under section No. 3 in the Communication, dealing with claim 1 of the secondary request, the applicant is requested to transfer a number of features from the characterising portion of claim 1 to the preamble thereof. Especially, the applicant is requested to make this transfer of nearly the entire first paragraph and also the two last paragraphs of the characterising portion of claim 1. A reconsideration of this request for transferring features to the preamble is respectfully requested for the following reasons:

The preamble of claim 1 is based on the closest prior art as disclosed in the above-mentioned document SE-A-450 141. Specifically, the last paragraph of the preamble of claim 1 includes the prior-art feature relating to a locking device arranged on the rear side forming a mechanical connection which locks the panels in said "second" direction. This paragraph in the preamble also states that this rear-side locking device comprises a locking groove. Thus, the preamble of

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claim 1 already identifies both the prior-art first mechanical connection and the prior-art second mechanical connection, and also identifies the prior-art locking groove of the second mechanical connection.

However, the second mechanical connection of the invention is implemented in a way that differs substantially from the prior-art spring clips. In the inventive system, the rear-side locking device comprises a strip which is integrated with the panel. Furthermore, this strip extends throughout substantially the entire length of the joint edge. Thus, the term "strip" refers to an element having a longitudinal extension in the direction of the joint edges. The expression "integrated with" is defined in the application as an element which is either fixedly connected to the panel at the factory, or an element integrally formed with the panel. Such an integrated strip extending along the joint edges differs essentially from the separate spring clips described in SE-A-450 141, which are not integrated with the panels and are not extended as defined in claim 1. Therefore, these novel features of the locking device should be retained in the characterising portion. The locking element being part of the novel strip should therefore also be retained in the same paragraph. However, if found necessary during the further examination, the applicant is willing to discuss an alternative wording of claim 1 where some feature relating to a locking element is present in the preamble of claim 1. If this should be necessary, the Examiner is asked to contact the undersigned for a discussion on this point.

Turning now to the two last paragraphs of claim 1, the first one relates to the possibility of relative displacement of the panels in the direction of the joint edges. This feature is an essential feature of the invention and is not present in SE-A-450 141. By including this feature in the invention, it becomes possible to lock the short edges to each other. As explained in the application as filed, the presence of a plurality of spring clips in the prior-art system in SE-A-450 141 will not allow any mutual displacement of the panels in the direction of the joint edges, since the panels are held together very tight by these spring clips. If necessary, a sample of this prior-art system could be submitted in order to demonstrate this fact. Accordingly, this novel feature of the invention should be retained in the characterising portion of claim 1.

The possibility of taking up the panels after laying is the subject matter of the last paragraph of claim 1. The spring clips in the prior-art system in SE-A-450 141 do not allow any taking-

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up of the panels after laying by turning a panel angular from a strip. On the contrary, the spring clips effectively prevents any such attempt, since they would not leave the grooves and, therefore, since they cannot be extended in their longitudinal direction, would also prevent any rotational movement of one panel in relation to an adjacent panel. It should also be noted that the last paragraph of claim 1 refers to the "strip" which, as stated above, is a novel element in itself. Therefore, this paragraph of claim 1 should be retained in the characterising portion.

As indicated above, if there should remain any objections to the claims filed herewith, the Examiner is respectfully asked to contact the undersigned for a discussion on how such objections can be resolved.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Søren Giver'.

Søren Giver
Authorised Representative
AWAPATENT AB

Encl. Claims in triplicate

204150-9694450

1. A system for providing a joint along adjacent
5 joint edges (3, 4) of two building panels (1, 2), especially floor panels, in which joint:

the adjacent joint edges (3, 4) together form a first mechanical connection locking the joint edges (3, 4) to each other in a first direction (D1) at right angles to the principal plane of the panels (1, 2), and
10 a locking device (6, 8, 14) arranged on the rear side (18, 16) of the panels (1, 2) forms a second mechanical connection locking the panels (1, 2) to each other in a second direction (D2) parallel to the principal
15 plane and at right angles to the joint edges (3, 4), said locking device (6, 8, 14) comprising a locking groove (14) which extends parallel to and spaced from the joint edge (4) of one (2) of said panels, termed groove panel, and which is open at the rear side (16) of the groove
20 panel (2), characterised in

that the locking device (6, 8, 14) further comprises a strip (6) integrated with the other (1) of said panels, termed strip panel, said strip (6) extending throughout substantially the entire length of the joint edge (3) of
25 the strip panel (1) and being provided with a locking element (8) projecting from the strip, such that when the panels are joined together, the strip (6) projects on the rear side of the groove panel (2) with its locking element (8) received in the locking groove (14) of the
30 groove panel (2),

that the panels, when joined together, can occupy a relative position in said second direction (D2) where a play (Δ) exists between the locking groove (14) and a locking surface (10) on the locking element (8) that is
35 facing the joint edges and is operative in said second mechanical connection,

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that the first and the second mechanical connection both allow mutual displacement of the panels (1, 2) in the direction of the joint edges (3, 4), and

that the second mechanical connection is so conceived as to allow the locking element (8) to leave the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly away from the strip (6).

2. A system as claimed in claim 1, characterised in that when the groove panel (2) is pressed against the strip panel (1) in said second direction (D2) and is turned angularly away from the strip (6), the maximum distance between the axis of rotation of the groove panel (2) and the locking surface of the locking groove (14) closest to the joint edges is such that the locking element (8) can leave the locking groove (14) without contacting the locking surface of the locking groove (14).

3. A system as claimed in claim 1 or 2, characterised in that the locking surface (10) of the locking element (8) is extended from the front side (22) of the strip (6) through a height in said first direction that is less than or equal to 2 mm.

4. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection is provided by the joint edge (4) of the groove panel (2) engaging, in said first direction, between the joint edge (3) of the strip panel (1) and the front side of the strip (6).

5. A system as claimed in any one of the preceding claims, characterised in that the strip (6) integrated with the strip panel (1) is made of a material different from that of the strip panel (1) and fixedly mounted on the strip panel (1) at the factory.

6. A system as claimed in claim 5, characterised in that the strip (6), at least for one of the two panels (1, 2), is received in a countersunk

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groove (40; 42) in the rear side (18; 16) of this one panel (1; 2).

7. A system as claimed in claim 5 or 6, characterised in

5 that the strip (6) is mounted in an equalising groove (40) which is countersunk in the rear side (18) of the strip panel (1) and exhibits an exact, predetermined distance (E) from its bottom to the front side (21) of the strip panel (1),

10 that the part of the strip (6) projecting behind the groove panel (2) engages a corresponding equalising groove (42) which is countersunk in the rear side (16) of the groove panel (2) and which exhibits the same exact, predetermined distance (E) from its bottom to the front

15 side (26) of the groove panel (2), and

that the strip (6) has at least such a thickness that the rear side (44) of the strip is flush with the rear sides (18, 16) of the panels.

8. A system as claimed in claim 7, characterised in that the strip (6) has such a thickness that it is only partly received in the equalising grooves (40, 42).

9. A system as claimed in any one of claims 5-8, characterised in that the strip (6) is fixed

25 to the strip panel (1) by means of a mechanical connection.

10. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a gripping edge (52) defined by two recesses (24, 50) in the

30 ping edge (52) defined by two recesses (24, 50) in the rear side (18) of the strip panel, and tongues, lips or the like (54, 56) which are bent or punched from the strip (6) and which press against opposite outer sides of the gripping edge (52).

11. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a recess

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(58) in the rear side (18) of the strip panel, and tongues, lips or the like (60) which are bent or punched from the strip (6) and which press against opposing inner sides of the recess (58).

5 12. A system as claimed in any one of claims 5-11, characterised in that the strip (6) is fixed to the strip panel (1) by means of a binder.

10 13. A system as claimed in any one of claims 5-12, characterised in that the strip (6) is made of a flexible, preferably resilient material, such as sheet aluminium.

15 14. A system as claimed in any one of claims 1-4, characterised in that the strip (6) is integrally formed with the strip panel (1), i.e. made in one piece with the strip panel (1).

15 15. A system as claimed in any one of the preceding claims, characterised in that the locking element (8) consists of a locking edge extended continuously along the strip (6).

20 16. A system as claimed in any one of claims 1-14, characterised in that the locking element (8) consists of a plurality of spaced-apart locking elements distributed throughout the length of the strip (6).

25 17. A system as claimed in any one of the preceding claims, characterised in that the panels (1, 2) are rectangular and intended, at each of their four edges (3, 4, 3', 4'), to be joined to a similar panel by a first mechanical connection of the aforementioned type and a second mechanical connection of the aforementioned type, each panel having a first pair of opposite joint edges (3, 4), one of which is provided with a strip (6) of the aforementioned type and the other of which is provided with a locking groove (14) of the aforementioned type, and a second pair of opposite joint edges (3', 4'),
30 one of which is provided with a strip (6') of the aforementioned type and the other of which is provided with a locking groove (14') of the aforementioned type.
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18. A system as claimed in any one of the preceding claims, characterised in that an underlay (46) of floor boards, foam, felt or the like is fixed to the rear sides (18, 16) of the panels.

- 5 19. A system as claimed in claim 18, characterised in that the underlay (46) is fixed so as to cover the strip (6) in said second direction at least up to the locking element (8), such that a joint between the underlays (46) of the two adjacent panels is offset in
10 said second direction relative to the joint edges (3, 4).

20. A system as claimed in any one of the preceding claims, characterised in that a sealing means, such as a sealing compound, a rubber strip or the like, is provided on the front side (22) of the strip between the locking element (8) and the joint edge (3)
15 of the strip panel to seal against the groove panel (2).

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AWAPATENT

 Handled by
Sören Giver/MP

 Helsingborg
23 March 1998

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 Our ref.
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 European Patent Office
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TYSKLAND

SENT BY FAX 89-2399-4465

 VÄLINGE ALUMINIUM AB
European Patent Application No. 94915725.9-2303

Dear Sirs,

Further to my letter dated 23 February 1998, new claims 1-22 are hereby enclosed in triplicate. The only difference between the new claims hereby submitted and the claims 1-20 submitted by my letter dated 23 February 1998, is that the new claims includes two new dependent claims 21 and 22. No other amendments or additions have been made.

The two new dependent claims 21 and 22 are directed especially to the embodiment and laying sequence illustrated e.g. in Fig 2a-2c, where the two panels during laying are held in mutual contact at the upper part of the adjacent joint edges during the angularly movement. New dependent claim 21 states that the first mechanical connection as well as the second mechanical connection are such that they allow the locking element to enter the locking groove if the groove panel is turned about its joint edge angularly towards the strip while holding the upper part of the joint edge of the groove panel in contact with the upper part of the joint edge of the strip panel. New dependent claim 22 states that the same contact can be maintained also when turning the panel upwards.

The two new dependent claims 21 and 22 are fully supported by the application as filed and, therefore, do not violate Article 123(2) EPC. Especially, support can be found in Figs. 2a-2c and in the corresponding text on page 16, lines 5-22. Reference can be made also to page 9, line 6 ("pressed against"), page 10, lines 7-14 ("...then moving the groove panel with its long side up to the long side...brought into engagement..."), page 13, lines 2-5 ("...the strip panel 2

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Page 2 (2)
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of Fig. 1a is pressed with its joint edge against the joint edge 3 of the strip panel 1 and is angled down..."), and page 14, lines 6-8 ("...can be taken up in the reverse order...").

If there should be any objections under Article 123(2) EPC on the two new dependent claims, the Examiner is respectfully asked to contact the undersigned as soon as possible.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Sören Giver', written over the typed name.

Sören Giver
Authorised Representative
AWAPATENT AB

Encl.
New claims 1-22 in triplicate

03433606-051402

CLAIMS

1. A system for providing a joint along adjacent joint edges (3, 4) of two building panels (1, 2), especially floor panels, in which joint:

the adjacent joint edges (3, 4) together form a first mechanical connection locking the joint edges (3, 4) to each other in a first direction (D1) at right angles to the principal plane of the panels (1, 2), and
a locking device (6, 8, 14) arranged on the rear side (18, 16) of the panels (1, 2) forms a second mechanical connection locking the panels (1, 2) to each other in a second direction (D2) parallel to the principal plane and at right angles to the joint edges (3, 4), said locking device (6, 8, 14) comprising a locking groove (14) which extends parallel to and spaced from the joint edge (4) of one (2) of said panels, termed groove panel, and which is open at the rear side (16) of the groove panel (2), characterised in

that the locking device (6, 8, 14) further comprises a strip (6) integrated with the other (1) of said panels, termed strip panel, said strip (6) extending throughout substantially the entire length of the joint edge (3) of the strip panel (1) and being provided with a locking element (8) projecting from the strip, such that when the panels are joined together, the strip (6) projects on the rear side of the groove panel (2) with its locking element (8) received in the locking groove (14) of the groove panel (2),

that the panels, when joined together, can occupy a relative position in said second direction (D2) where a play (Δ) exists between the locking groove (14) and a locking surface (10) on the locking element (8) that is facing the joint edges and is operative in said second mechanical connection,

that the first and the second mechanical connection both allow mutual displacement of the panels (1, 2) in the direction of the joint edges (3, 4), and

that the second mechanical connection is so conceived as to allow the locking element (8) to leave the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly away from the strip (6).

2. A system as claimed in claim 1, characterised in that when the groove panel (2) is pressed against the strip panel (1) in said second direction (D2) and is turned angularly away from the strip (6), the maximum distance between the axis of rotation of the groove panel (2) and the locking surface of the locking groove (14) closest to the joint edges is such that the locking element (8) can leave the locking groove (14) without contacting the locking surface of the locking groove (14).

3. A system as claimed in claim 1 or 2, characterised in that the locking surface (10) of the locking element (8) is extended from the front side (22) of the strip (6) through a height in said first direction that is less than or equal to 2 mm.

4. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection is provided by the joint edge (4) of the groove panel (2) engaging, in said first direction, between the joint edge (3) of the strip panel (1) and the front side of the strip (6).

5. A system as claimed in any one of the preceding claims, characterised in that the strip (6) integrated with the strip panel (1) is made of a material different from that of the strip panel (1) and fixedly mounted on the strip panel (1) at the factory.

6. A system as claimed in claim 5, characterised in that the strip (6), at least for one of the two panels (1, 2), is received in a countersunk

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groove (40; 42) in the rear side (18; 16) of this one panel (1; 2).

7. A system as claimed in claim 5 or 6, characterised in

5 that the strip (6) is mounted in an equalising groove (40) which is countersunk in the rear side (18) of the strip panel (1) and exhibits an exact, predetermined distance (E) from its bottom to the front side (21) of the strip panel (1),

10 that the part of the strip (6) projecting behind the groove panel (2) engages a corresponding equalising groove (42) which is countersunk in the rear side (16) of the groove panel (2) and which exhibits the same exact, predetermined distance (E) from its bottom to the front
15 side (26) of the groove panel (2), and

that the strip (6) has at least such a thickness that the rear side (44) of the strip is flush with the rear sides (18, 16) of the panels.

8. A system as claimed in claim 7, characterised
20 terised in that the strip (6) has such a thickness that it is only partly received in the equalising grooves (40, 42).

9. A system as claimed in any one of claims 5-8, characterised in that the strip (6) is fixed
25 to the strip panel (1) by means of a mechanical connection.

10. A system as claimed in claim 9, characterised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a gripping edge (52) defined by two recesses (24, 50) in the
30 rear side (18) of the strip panel, and tongues, lips or the like (54, 56) which are bent or punched from the strip (6) and which press against opposite outer sides of the gripping edge (52).

11. A system as claimed in claim 9, characterised
35 terised in that the mechanical connection between the strip (6) and the strip panel (1) comprises a recess

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(58) in the rear side (18) of the strip panel, and tongues, lips or the like (60) which are bent or punched from the strip (6) and which press against opposing inner sides of the recess (58).

5 12. A system as claimed in any one of claims 5-11, characterised in that the strip (6) is fixed to the strip panel (1) by means of a binder.

13. A system as claimed in any one of claims 5-12, characterised in that the strip (6) is made of
10 a flexible, preferably resilient material, such as sheet aluminium.

14. A system as claimed in any one of claims 1-4, characterised in that the strip (6) is integrally formed with the strip panel (1), i.e. made in
15 one piece with the strip panel (1).

15. A system as claimed in any one of the preceding claims, characterised in that the locking element (8) consists of a locking edge extended continuously along the strip (6).

20 16. A system as claimed in any one of claims 1-14, characterised in that the locking element (8) consists of a plurality of spaced-apart locking elements distributed throughout the length of the strip (6).

17. A system as claimed in any one of the preceding
25 claims, characterised in that the panels (1, 2) are rectangular and intended, at each of their four edges (3, 4, 3', 4'), to be joined to a similar panel by a first mechanical connection of the aforementioned type and a second mechanical connection of the aforementioned
30 type, each panel having a first pair of opposite joint edges (3, 4), one of which is provided with a strip (6) of the aforementioned type and the other of which is provided with a locking groove (14) of the aforementioned type, and a second pair of opposite joint edges (3', 4'),
35 one of which is provided with a strip (6') of the aforementioned type and the other of which is provided with a locking groove (14') of the aforementioned type.

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18. A system as claimed in any one of the preceding claims, characterised in that an underlay (46) of floor boards, foam, felt or the like is fixed to the rear sides (18, 16) of the panels.

5 19. A system as claimed in claim 18, characterised in that the underlay (46) is fixed so as to cover the strip (6) in said second direction at least up to the locking element (8), such that a joint between the underlays (46) of the two adjacent panels is offset in
10 said second direction relative to the joint edges (3, 4).

20. A system as claimed in any one of the preceding claims, characterised in that a sealing means, such as a sealing compound, a rubber strip or the like, is provided on the front side (22) of the strip between the locking element (8) and the joint edge (3)
15 of the strip panel to seal against the groove panel (2).

21. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection as well as the second mechanical
20 connection are such that they allow the locking element (8) to enter the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly towards the strip (6) while holding the upper part of the joint edge (4) of the groove panel (2) in contact with the
25 upper part of the joint edge (3) of the strip panel (1).

22. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection as well as the second mechanical connection are such that they allow the locking element
30 (8) to leave the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly away from the strip (6) while holding the upper part of the joint edge (4) of the groove panel (2) in contact with the upper part of the joint edge (3) of the strip panel
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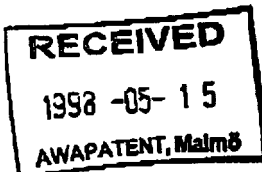
Generaldirektion 2

Directorate General 2

Direction Générale 2

HBG(8)

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 200 71 Malmö
 SUEDE



BY FAX ON 08/05/98

(33 pages in total)

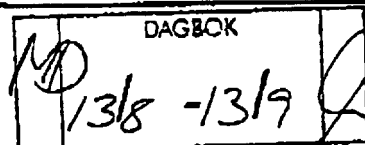


At the attn. of Mr. Giver

FAX - No. 0046 4216 0942

Application No. 94 915 725.9-2303	Ref. 2950767	Date 13.05.98
Applicant VÄLINGE ALUMINIUM AB		

Communication under Rule 51(4) EPC

Sum
5/14

You are hereby informed that the Examining Division intends to grant a European patent on the basis of the above application with the text and drawings as indicated below:

Text for the Contracting States:

AT BE CH LI DE DK ES FR GB GR IE IT LU MC NL PT SE

Description, pages:

1-19 as published

Claims, No.:

1-22 as received on 26.03.1998 with letter of 23.03.1998

Drawings, sheets:

1-6 as published

With the following amendments to the above-mentioned documents by the Examining Division:

Description, page: 1

Claims, No.: 21*, 22*

Comments:

- * The amendment to claims 21 and 22 were agreed by telephone with the Agent, Mr Giver, on 31.03.1998, in the interests of clarity.

09343696-051402



Date

13. 05. 98

Sheet 2

Application-No.: 94 915 725.9

A copy of the relevant documents is enclosed.

The title of the invention in the three official languages of the European Patent Office, the international patent classification, the designated Contracting States and the registered name of the applicant are shown on the attached EPO Form 2056.

You are requested to state your approval of the text specified above **within four months** of this notification. Failure to do so will result in refusal of the application under Article 97(1) EPC, except as provided by Rule 51(5) EPC, second sentence.

The filing of a divisional application is only possible up to the approval of the text specified above (Rule 25(1) EPC). Concerning the possibilities of accelerated prosecution of European patent applications reference is made to OJ EPO 1997, 340.

Further information concerning the acceptability of amendments or the filing of a separate set of claims for one or more designated Contracting States that have entered a reservation under Article 167(2)a) EPC will be found in the Guidelines for Examination in the EPO, C-VI, 4.8 - 4.10 and C-VI, 15.1.2 - 15.1.4.

If the translation of the priority document(s), as required by Article 88(1) EPC, or the declaration according to Rule 38(4) EPC has not yet been filed, it is to be filed within the time limit mentioned in Rule 38(4) EPC at the latest.



Ide, F
For the Examining Division
Tel. No.: (089) 2399-2449

Enclosure(s): Form 2056
 30 Copies of the relevant documents



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Direction Générale 2

Andersson, Per-Olof
 AWAPATENT AB,
 Box 5117
 200 71 Malmö
 SUEDE

Datum/Date

13. 05. 98

Anm./Ref./Réf. 2950767	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 94915725.9-2303
Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire VÄLINGE ALUMINIUM AB	

For the intended grant of a European patent, (1) the title of the invention in the three official languages of the European Patent Office, (2) the International Patent Classification and (3) the designated Contracting States and the applicant's registered name, address and country of residence or principal place of business are set out below.

- (1)
- VERBINDUNGSSYSTEM FÜR GEBÄUDEPLATTEN
 - SYSTEM FOR JOINING BUILDING BOARDS
 - SYSTEME D'ASSEMBLAGE DE PANNEAUX DE CONSTRUCTION
- (2) CLASS STRING: E04F15/14, E04F15/02, E04F13/08
- (3) AT-BE-CH-DE-DK-ES-FR-GB-GR-IE-IT-LI-LU-MC-NL-PT-SE
 VÄLINGE ALUMINIUM AB
 Vångavägen 48
 260 40 Viken/SE

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201150-96941560

18. A system as claimed in any one of the preceding claims, characterised in that an underlay (46) of floor boards, foam, felt or the like is fixed to the rear sides (18, 16) of the panels.

5 19. A system as claimed in claim 18, characterised in that the underlay (46) is fixed so as to cover the strip (6) in said second direction at least up to the locking element (8), such that a joint between the underlays (46) of the two adjacent panels is offset in
10 said second direction relative to the joint edges (3, 4).

20. A system as claimed in any one of the preceding claims, characterised in that a sealing means, such as a sealing compound, a rubber strip or the like, is provided on the front side (22) of the strip between the locking element (8) and the joint edge (3)
15 of the strip panel to seal against the groove panel (2).

21. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection as well as the second mechanical
20 connection are such that they allow the locking element (8) to enter the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly towards the strip (6) while holding the upper ^{corner} part of the joint edge (4) of the groove panel (2) in contact with the
25 upper ^{corner} part of the joint edge (3) of the strip panel (1).

22. A system as claimed in any one of the preceding claims, characterised in that the first mechanical connection as well as the second mechanical
30 connection are such that they allow the locking element (8) to leave the locking groove (14) if the groove panel (2) is turned about its joint edge (4) angularly away from the strip (6) while holding the upper ^{corner} part of the joint edge (4) of the groove panel (2) in contact with the upper ^{corner} part of the joint edge (3) of the strip panel
35 (1).

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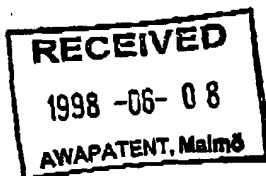
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Generaldirektion 2

Directorate General 2

Direction Générale 2

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200 71 Malmö
SUEDE



Datum/Date 04.06.98

Anm./Ref./RM. 2950767	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 94915725.9-2303/0698162
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire VÄLINGE ALUMINIUM AB	

COMMUNICATION PURSUANT TO ARTICLE 115(2) EPC

Please find enclosed observations by a third party concerning the patentability of the invention of the above-mentioned patent application. That person is not a party to the proceedings before the EPO (Art. 115(1) EPC).

Under Article 115(2) EPC you may comment on the observations.

Formalities Officer
Tel. No. 089/2399 - 2449

Fr
Françoise Ide

204450-054400

D07B73F

BUREAU M.F.J. BOCKSTAEL

BRUXELLES - ARENBERGSTRASSE 13 - B-2000 ANTWERPEN - BELGIQUE

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EUROPEAN PATENT OFFICE
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D-80298 MÜNCHEN
DUITSLAND

UW Ref:

CN Ref: A.13586
GV/mb

24 April 1998

Dear Sirs,

2703

re: European patent application No. 94915725.9 (Publ.No. 0.698.162)
in the name of: VALINGE ALUMINIUM AB.

Under art. 115 EPC, we wish to file following observations, regarding
the above mentioned European patent application.

These observations consist, on the one hand, of a reaction to the
letter of the representative of VALINGE ALUMINIUM AB dated 23 February
1998, and, on the other hand, of observations relating to art.123 EPC.

*
*
*

Observations regarding the letter dated 23 February 1998.

In his letter of reply, the representative of the applicant tries to
explain that the wording of claim 1 of the secondary request in fact
covers the same subject-matter as claim 1 of the main request. This
means that the representative of the applicant is of the opinion that
both the embodiments showing a definite play, and the embodiments
showing no play are covered by claim 1 of the main request.

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to the file on 28.05.98 ID !

BELGIAN AND EUROPEAN PATENT ATTORNEYS - BENELUX AND EUROPEAN TRADE MARK ATTORNEYS

BANKEN-RANQUES: BEL 022-4007532-43 - KB 468-651700-77 - CL 510-0023220-31 - PCN-CCN 000-0272305-05 - NPA/CA 26 541 - BT/17YA 6E 400 326.955

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More particularly, the representative of applicant now tries to explain that the word "can" in the expression "the panels, when joined together, can occupy a relative position in said second direction where a play exists between...", means that the play can or cannot exist. In our opinion this is a clear misinterpretation of claim 1 with the intention to enlarge the scope of this claim.

In fact the word "can" refers to the word "occupy" and not to the word "exists".

The expression "where a play exists" in fact means "whereby a play exists", which means that there is always a play. Due to the presence of the play the panels "can" occupy a relative position, which means that they "have the possibility" to occupy different positions.

It is clear that the statement of the representative of the applicant renders the wording of claim 1 of the secondary request unclear. We do understand that we cannot intervene in the proceedings at this time, but it is expected that in case that a patent should be granted, claim 1 should be formulated in a clear and concise manner, as required by art. 84 EPC and that ambiguous terms are excluded, by clearly stating the existence of the play.

Furthermore, we would like to draw the attention of the Examiner to the fact that the statement "... the invention as defined in claim 1 differs also in other aspects from the closest prior art." (see letter of 23 February 1998 of the representative of the applicant, third paragraph of page 2) seems in contradiction with the statement of the representative's letter of 26 June 1997, second paragraph of second page, in which it is said that the limitation that the panels can occupy a relative position in said second direction was introduced in order to distinguish the invention from prior art spring clips (SE 450.141).

Furthermore, we would also like to draw the attention of the Examiner to the fact that, as explained further on, there is a clear difference between the expressions "integrated" and "integrally", and that the statement of the representative of the applicant on page 3, second paragraph, in which it is said that "integrated" means either fixedly connected to the panel, or integrally formed with the panel, is not correct.

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3.

Regarding the possibility to mutually displace coupled boards in the direction of the joint edges (see second full paragraph on page 3 of the representative's letter dated 23 February 1998), it should be noted that such feature is clearly disclosed in GB 1.430.423, page 3 lines 10-15. Hereby it should also be noted that the joint structure shown in GB 1.430.423, apart from the fact that no separate strip and no play are used, is identical to the joint structure proposed in EP 0.698.162. This is very clear when turning figure 2 of GB 1.430.423 upside down.

Regarding the joint structure disclosed in GB 1.430.423, it is clear that this structure also provides in a locking action in two directions. This is described word for word on page 2, lines 105-113.

Important is also to note that the members 10 and 11 of GB 1.430.423 can be released again, as described on page 2, lines 29-31. It is obvious that to release the members 10 and 11 from each other, this will also be done by turning one member angularly away from the other panel, similar as disclosed in the last paragraph of claim 1 of the secondary request.

Observations relating to art. 84 EPC and art. 123 EPC.

Claim 14 is added during the proceedings and claims that the strip 6 is integrally formed with the strip panel 8, i.e. made in one piece with the strip panel 1.

This claim 14 depends on claims 1-4.

We would like to draw the attention of the Examiner to the fact that the embodiment in which the strip 6 is integrally formed with the strip panel 8 is described in conjunction with the use of the separate strip 74 (see description page 17, line 36 to page 18, line 17, as well as figure 5).

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The description does not comprise a clear indication that the invention also relates to panels, having a strip 6 which is integrally formed with the panel, and in which the scrip 74 is omitted. Consequently, present claim 14, as being dependent on claims 1-4, relates to subject-matter which extends beyond the content of the application as filed, and therefore in our opinion does not comply with art.123 EPC.

In fact claim 14 was added after the applicant noticed that competitors were manufacturing flooring panels having a strip portion which is formed in one piece with the panel and which were not provided with the strip 74.

Moreover, with respect to the above said, we also would like to draw the attention of the Examiner to the fact that the main object of the invention described in EP 0.698.162 substantially consists in providing a system for joining together building panels whereby the strength of the joint is no longer limited by the strength of the material of the panel itself or, vice versa, whereby the minimum thickness of the panel is no longer limited by requirements necessary to realise coupling portions at the edges (see objects and problems to be solved described in the introduction of the application, for instance page 4, lines 3-10 and page 5, lines 14-199). In other words EP 0.698.162 aims a solution to the problem that connections by means of a normal tongue and groove connection provided in the panel itself are not sufficiently strong and in certain applications impossible to produce.

According to the solution proposed in EP-0.695.162 this problem is solved either by using a separate strip 6 fixed to the panel, or by using a strip 6 which is in one piece with the panel but which in that case is provided with an additional strip 74. These strips 6-74 provide in a strong coupling portion.

It is clear that if in the embodiment of figure 3 the strip 74 is omitted, the posed problem is no longer solved. Consequently, also for this reason, an embodiment similar to the one in figure 3 but without the strip 74 is in our opinion not within the content of the application as filed.

In fact the strip 74 in the embodiment of figure 5 is provided to solve the same problems as those which are solved with the strip 6 in the other shown embodiments (this is clear from the description, especially from lines 7 to 9 on page 18, in which it is stated that the strip 74

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has "a width covering approximately the same surface as the separate strip 6 of the previous embodiments"). When the strip 74 is omitted, said problems are no longer solved, and the resulting embodiments are no longer within the scope of the invention.

Furthermore, added claim 14 is in our opinion not clear (art. 84 EPC) as the subject-matter of claim 14 is in contradiction with the subject-matter of claim 1 from which it depends. In claim 1 it is stated that the strip 6 is "integrated" with the panel, which means that the strip 6 consists of a separate element fixed to the panel (according to the Webster's dictionary "integrated" means "composed of separate parts united together to form a more complete entity"). In the added claim 14, it is said that the strip is "integrally" formed with the panel, which according to the applicant means that it is made in one piece. In our opinion, the term "integrally" is opposite to "integrated", and therefore claim 14 is not clear in that it refers to claims 1 to 4.

*
* *

It is respectfully requested that the Examiner handling the European patent application No. 94915725.9 should take in consideration the above formulated observations.

Yours faithfully.



E. Donné M.Sc.
European Patent Attorney

09343696 054402

BUREAU M.F.J. BOCKSTAEL

NV/SA

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TECHNICAL NOTE

OPPOSITION EP 0.698.162 B1

FACTS - GROUNDS - ARGUMENTS

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BELGIAN AND EUROPEAN PATENT ATTORNEYS — BÉNELUX AND EUROPEAN TRADEMARK ATTORNEYS

BANKEN-BANQUES: BBL 320-0007538-42 • KB 409-8513001-77 • CL 610-0023220-31 • PCR-CCP 000-0278395-05 • HRA/RCA 25 541 • BTW/TVA
 BE 400.528.855

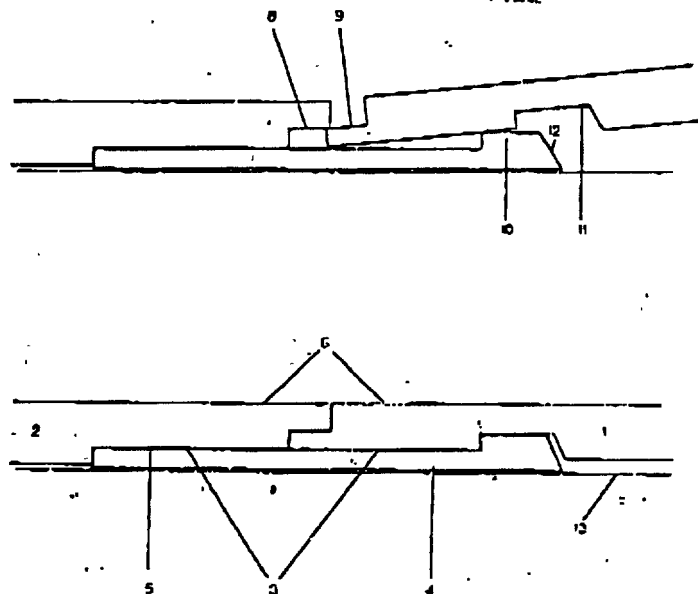
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I. INTRODUCTION

I.1. Background and subject of the patent protection conferred by EP 0.698.162

At May 10th, 1993, a first patent application was filed in Sweden by VÄLINGE ALUMINIUM AB (application No.9301595-6) which related to panels for floors.

In this application, exclusively separate strips were used which are provided at the rear side of the panels and which allow that the panels are connected to each other at their edges. In the patent application, several possibilities were described, amongst which also a mechanical coupling which provides in a locking in vertical as well as in horizontal direction, as represented below:

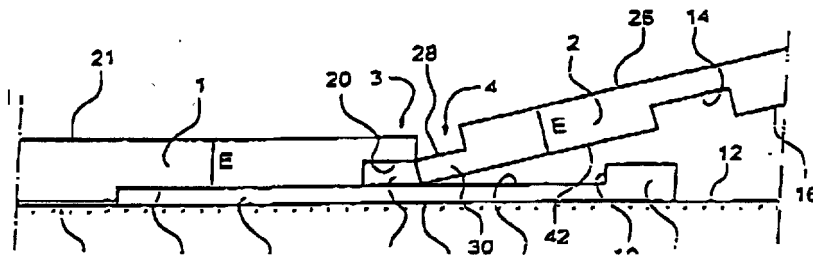


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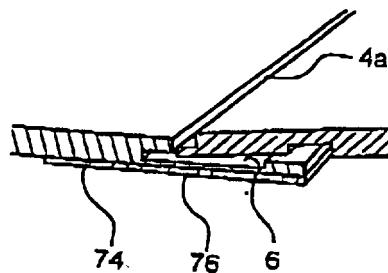
At April 29th, 1994, an international patent application on the name of VÄLINGE ALUMINIUM AB was filed, from which the European Patent EP 0.698.162 originated.

In this international patent application, which was published under the No. WO 94/26999, substantially two different forms of embodiment were described, namely:

1. a coupling using a separate strip which is fixed at each panel concerned, as represented below:



2. a coupling using a strip which is realized integrally with the panel, whereby, however, a separate strip 74 is provided under the strip 6, as represented below:

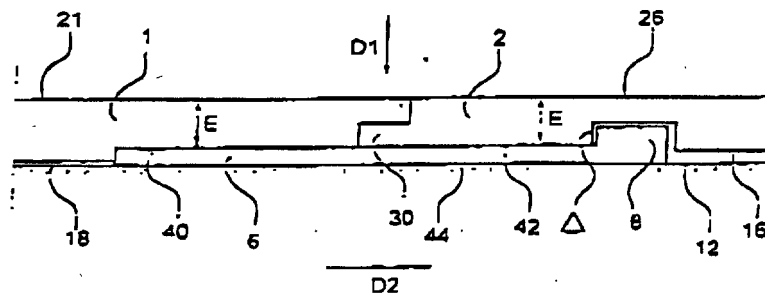


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According to VÄLINGE ALUMINIUM AB, the patent application also relates to embodiments in which the strip 6 is realized in one piece with the panel, without the aforementioned strip 74 being present.

With this, as set forth further on, it can not be agreed.

In any case, irrespective of the preceding, an important aspect in this international patent application (WO 94/26999) consists in that in between the locking surfaces which provide for the horizontal locking, always an outspoken play has to be present. This play (indicated by Delta in the following figure) forms an essential characteristic of the main claim and thus unambiguously forms a restriction which limits the extent of protection of the European patent No. 0.698.162 resulting therefrom.



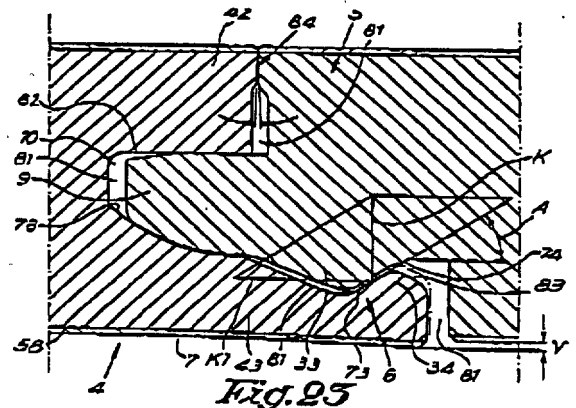
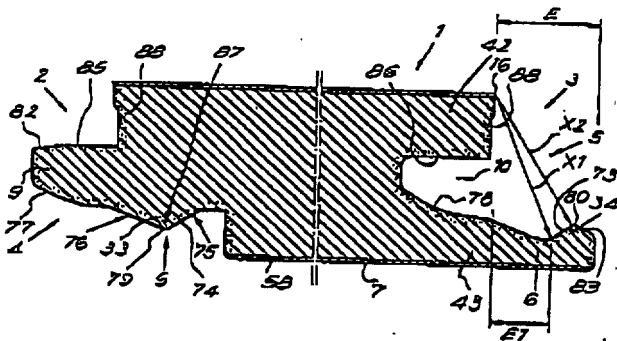
VÄLINGE ALUMINIUM AB has granted licenses to the company FIBO TRESPO for a product which is derived from the aforementioned alleged invention, which product is commercialized under the name ALLOC.

The ALLOC system, in fact, relates to laminate floorings and uses aluminium strips for the couplings between the panels. Practice has shown that this product basically has little success in relation to the total turnover of laminate floorings.

I.2. The UNICLIC system

In the year 1996, the company UNILIN developed an own product for which, by the way, patent protection has been applied for in the name of UNILIN BEHEER BV - The Netherlands, and which is commercialized by the company UNILIN DECOR NV from Belgium under the trademark UNICLIC.

The UNICLIC system is designed in such a manner that separate strips are no longer necessary and that the play necessary in the VÄLINGE patent could be excluded, as illustrated below:



Right from the start, the UNICLIC system had an enormous success on the market.

II. REASONS FOR OPPOSITION

From the moment when the UNICLIC system started to prove its success, the company VÄLINGE ALUMINIUM AB took all kinds of steps in order to still alter and broaden their patent protection, in particular, in order to obtain that, amongst others, the aforementioned play might be removed from the patent protection in order to also be able to claim patent rights against the UNICLIC system.

The European granting procedure has shown that this broadening is unacceptable, which, in fact, means that coupling systems which do not apply the aforementioned play, are not within the scope of the European patent No. 0.698.162.

In consideration of the fact that VÄLINGE ALUMINIUM AB, regardless of the decision of the European Patent Office, still maintain their point of view that the UNICLIC system represents a copy of the European patent No. 0.698.162, and illegally intimidate the distributors of the UNICLIC system, the only solution is to take actions which establish that the European patent No. 0.698.162 is invalid, at least to that extent as it relates to floor panels whereby the strip is realized integrally with the panel and, on the other hand, to request the authorized courts for a judgement on the alleged infringement which, according to VÄLINGE ALUMINIUM AB, is exerted by the UNICLIC system on the rights resulting from the European patent EP 0.698.162.

This opposition forms part of these actions.

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III. APPLIED DOCUMENTS

The documents to which is referred in the following argumentation and preceding introduction are represented in the following list:

Documents referring to the state of the art (copy enclosed)

- | | |
|----------------|---------------------------|
| - BE 417.526 | - GB 2.243.381 |
| - CH 200.949 | - GB 2.256.023 |
| - DE 15.34.278 | - JP 54-65528 |
| - DE 25.02.992 | - JP 57-119056 |
| - DE 26.16.077 | - JP 31-69967 |
| - DE 29.17.025 | - US 753.791 |
| - DE 30.41.781 | - US 1.124.228 |
| - DE 35.12.204 | - US 3.310.919 |
| - DE 35.44.845 | - US 3.538.665 |
| - DE 42.15.273 | - US 3.694.983 |
| - DE 7102476 | - US 3.859.000 |
| - DE 7402354 | - US 4.426.820 |
| - DE 8604004 | - US 4.769.963 |
| - FR 1.293.043 | - US 5.295.341 |
| - FR 2.568.295 | - WO 84/02155 |
| - GB 424.057 | - WO 93/13280 |
| - GB 1.430.423 | - WEBSTER'S, p.862, 1992, |
| - GB 2.117.813 | PAMCO Publ.Comp.Inc.(NY) |

Other documents (no copy enclosed)

- WO 94/26999 (Internat. patent appl. of VÄLINGE)
- SE 9301595-6 (priority application of VÄLINGE)
- WO 97/47834 (Internat. patent appl. for UNICLIC system)
- Examination report from October, 31st, 1997, from granting procedure of European patent EP 0.698.162 (VÄLINGE)

IV. VALIDITY

As will become clear from the following elucidation, the European patent EP 0.698.162 has to be considered invalid.

IV. Grounds for invalidity

In this case, the following grounds for invalidity, opposition, respectively, are applicable:

IV.1.1. The subject of the European patent is not based on the contents of the patent application as filed and, consequently, does not comply to article 123 of the European Patent Convention.

IV.1.2. The subject of the patent is non-patentable due to lack of novelty and inventivity and therefore does not comply to articles 52(1), 54 and 56 of the European Patent Convention.

IV.1.3. In certain aspects, the subject of the patent is not described sufficiently clear in order to be realized by a skilled person.

IV.2. Preceding observation

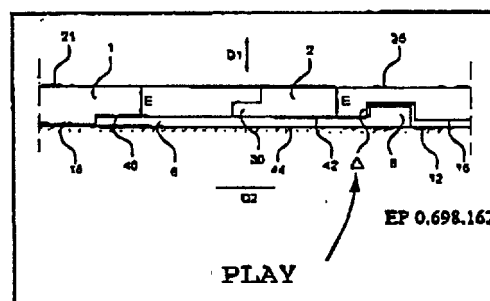
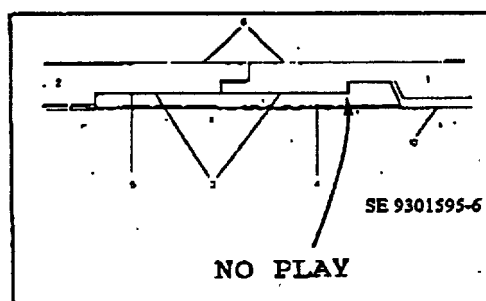
The contents of the international patent application from which the European patent EP 0.698.162 originated, differs from the contents of the Swedish patent application SE 9301595-6 from which priority is claimed in such a manner that this latter does not provide a valid priority.

More particularly, no valid priority can be claimed for the following two reasons:

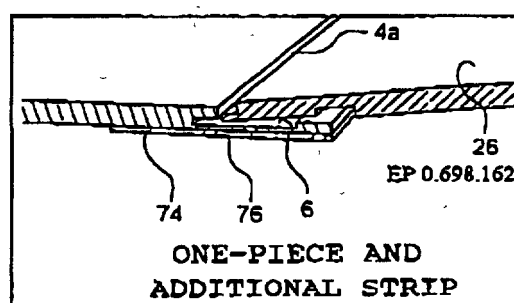
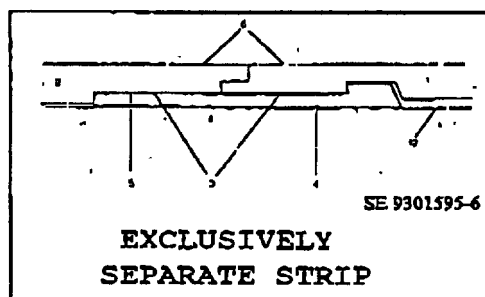
- 1) The contents of claim 1, of the international patent application WO 94/26999 as well as of the corresponding

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European patent No. 0.698.162, is limited to embodiments whereby an distinct play exists between the locking surfaces of the panels, more particularly between the locking surfaces which prevent the panels from shifting apart horizontally. The application of such play is in no way described or represented in the priority document SE 9301595-6. There is no doubt that it is not possible to claim any priority for embodiments in which such play indeed exists, in other words, for all embodiments to which the claims of the European patent EP 0.698.162 relate.



2) According to the present claims, in particular claim 14, the European patent No. 0.698.162 also relates to embodiments whereby the strip 6 is made in one piece with the panel. In case that the claims remain unaltered, it should be noted that in the priority document exclusively the application of a separate strip which is fixed at the panel is mentioned, and that no valid priority can be claimed for embodiments whereby the strip is made in one piece with the panel.



10.

Thus, the filing date of the international patent application, namely, April 29th, 1994, is applicable as the valid priority date of the European patent No. 0.698.162.

This means that as "state of the art", all publications come into consideration which date from before April 29th, 1994.

IV. Grounds and arguments

The grounds and arguments showing that the European patent No. 0.698.162 in fact is invalid will be explained hereafter per claim in detail.

Claim 1:

a) Contents of claim 1

In claim 1, in concise manner protection is sought for a system for providing a joint along adjacent joint edges (3,4) of two building panels (1, 2), especially floor panels,

a) whereby a first mechanical connection is formed in a first direction D1 perpendicular to the plane of the panels;

b) whereby on the rear side (18, 16) of the panels, a locking device is provided forming a second mechanical connection in a direction D2 parallel to the plane of the panels and perpendicular to the joint edges (3,4), which locking device comprises a locking groove (14) which extends in a parallel manner to the joint edge (4) of one of the panels and which is open at the rear side;

characterized in that:

c) the locking device (6,8,14) further comprises a strip (6) which is integrated with the other panel (1), which strip extends over the substantially the entire length of the connected edge (3) and is provided with a locking element (8) projecting from the strip (6) in such a manner that, when the panels are connected to each other, the strip (6) projects on the rear side of the other panel (2), whereby the locking element (8) is received in the locking groove (14);

d) that the panels, when connected to each other, can take a relative position in the second direction D2, whereby a play (Delta) between the locking groove (14) and a locking surface (10) of the locking element (8) exists, which play is operative in the aforementioned second mechanical connection;

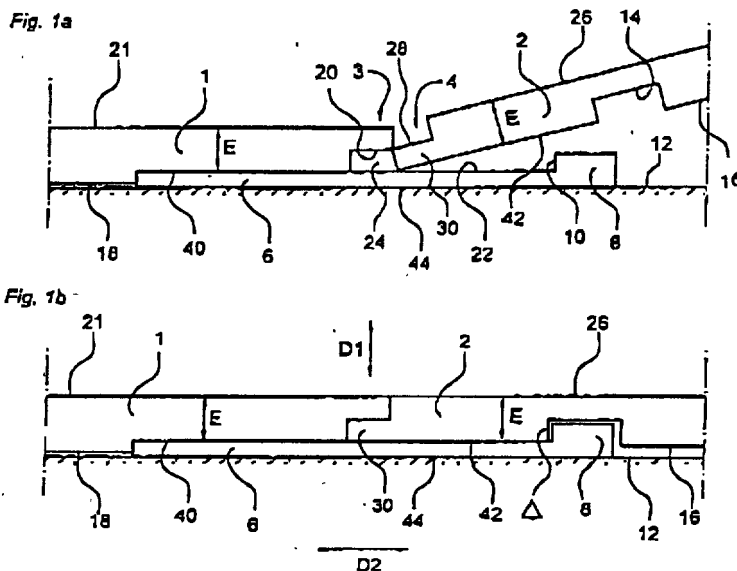
e) that the first and second mechanical connection allow for a mutual displacement of the panels (1,2) in the direction of the edges;

f) that the second mechanical connection is designed in such a way that the locking element (8) can leave the locking groove (14) when the panel with the groove is turned about its joint edge.

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The aforementioned characteristics are visible in the following copy of figures 1a and 1b of the patent concerned.



b) Meaning of the term "integrated"

During the granting procedure of the patent, the patent proprietor added, amongst others, claim 14 which refers to claim 1 and in which it is said that the strip 6 is made "integrally", more particularly in one piece, with the rest of the panel.

In consideration of the fact that claim 14 refers to claim 1, the patent proprietor indicates that, in their opinion, claim 1 also relates to all kinds of forms of embodiments, whereby the strip 6 is made in one piece with the panel (this opinion is also expressed by the patent proprietor in their correspondence

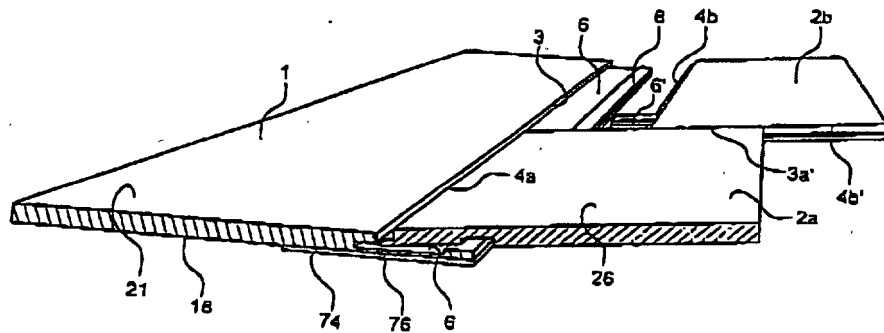
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with UNILIN DECOR N.V.).

As will become evident from the further elucidation when discussing claim 14, the European patent can only relate to embodiments whereby the strip 6 is integral, as far as this strip 6 then is also reinforced further by an additional strip 74, as illustrated in figure 5 (see copy here below).

Fig. 5

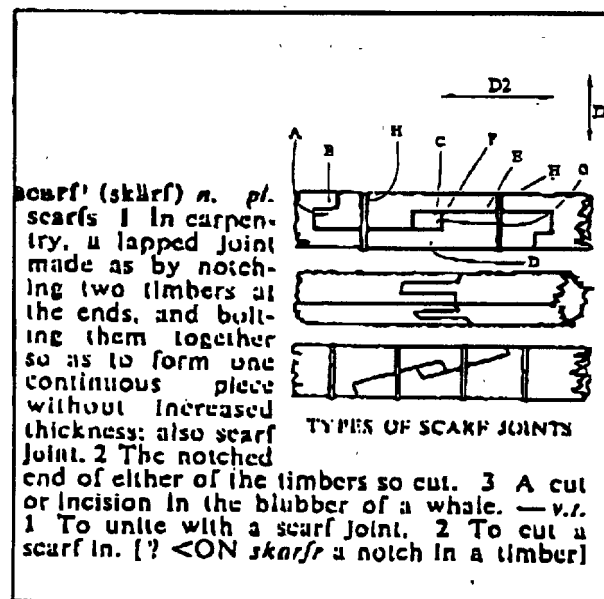


Although claim 1, thus, in fact does not relate to forms of embodiment whereby the strip 6 is made in one piece with the panel, which forms do not have an additional strip 74, the patent proprietor, however, denying this; hereafter, for completeness' sake, the lack of novelty and inventivity of both forms of embodiments is described.

c) Reasons for invalidity in the case that claim 1 relates to a strip which is made in one piece with the panel

c.1. No novelty in view of WEBSTER'S

The connection between the panels, as claimed in claim 1 of EP 0.698.162, is not new, as all characteristics of such connection are known from a traditional, so-called "scarf" connection. To this aim, we refer to the uppermost illustration from WEBSTER'S, p. 862, 1992, PAMCO Publ.Comp.Inc.(N.Y.):



As indicated in the above figure, the coupling shows a first

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mechanical connection formed by the tongue A and the groove B which provide for a locking according to direction D1 (characteristic a).

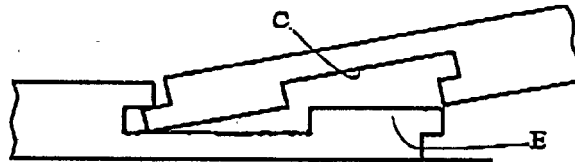
There is also a second mechanical connection, formed by a groove C which is open at its rear side, whereby a locking according to direction D2 is obtained (characteristic b).

The locking device also comprises a strip D with a projecting locking element E which is received in the groove C (characteristic c).

Furthermore, the represented "scarf" connection also shows the essential play F between the locking groove B and the locking surface G (characteristic d).

It is obvious that, as long as the connection elements H are not provided, the two mechanical connections also allow for a displacement in longitudinal direction (characteristic e).

Furthermore, the "scarf" connection is realized in such a way that the locking element E can leave the locking groove C when the panel showing the groove C is turned about its joint edge, as illustrated here below.



From the preceding, it becomes obvious that the connection, as claimed in claim 1 of the European patent EP 0.698.162, is

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nothing but a trivial connection which, at the day of the filing of this patent, namely, April 29th, 1994, has already been widely known for the connection of all kinds of wooden constructions (timber), in other words, wooden "building panels", too.

C.2. No novelty in view of DE 2.917.025

In the document DE 2.917.025, panels are described which can be disconnected from each other.

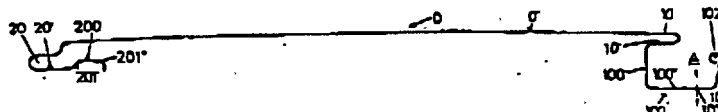
The description on pages 3 and 4 of said document is worded as follows:

"Dies wird nach der Erfindung dadurch erreicht, daß zu einer lösbaren Paneelenverbindung geeignete und im Breitenverband vereinigbare Paneele mit Profilleisten im Bereich gegenüberliegender Randflächen durch eine solche Gestaltung der Profilleisten gekennzeichnet sind, daß sie im Querschnitt gesehen unterhalb einer bündig an die Paneeloberfläche anschließenden Nase einen in Längsrichtung der Nase über diese hinaus hervorragenden Spannhaken aufweisen (Profilleistengestaltung (A)) bzw. unterhalb einer von der Paneeloberfläche abgesetzten Gegennase für den Eingriff eines Spannhakens eine Einraststrecke mit im Abstand voneinander angeordneten Anschlägen aufweisen, zwischen denen ein eingerasteter Spannhaken als Gegenanschlag unter zumindest teilweiser Überlappung der Nasen in Längsrichtung der Nasen verschiebbar ist (Profilleistengestaltung (B)), - wobei zum Breitenverband verbunden werden können entweder Paneele mit der Profilleistengestaltung (A, B) oder solche mit der Profilleistengestaltung (A, B) und (B, B) oder solche mit einer Profilleistengestaltung (A, B) und (A, A) oder solche mit einer Profilleistengestaltung (B, A) und (B, B) und solche mit einer Profilleistengestaltung (A, A), (B, B) und (A, B)."

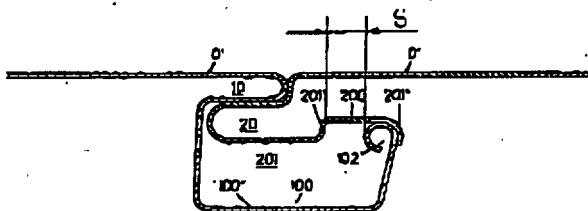
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When a coupling is realized according to this description, a coupling is obtained showing exactly all characteristics of claim 1 of EP 0.698.162. More particularly, a panel is obtained looking as represented here below.

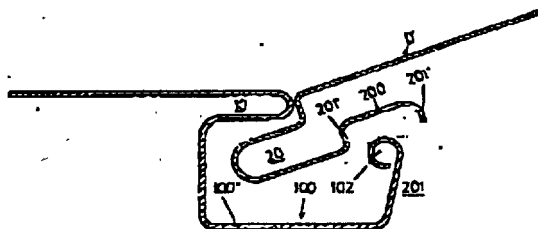


The coupling then is as follows:



It is evident that this coupling shows all aforementioned characteristics a to f. Summarized, thus, also a locking in two directions is obtained, whereas also a play, here above indicated by S, is present.

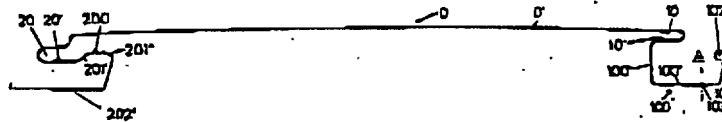
The panels can be mutually uncoupled by means of a rotational movement, analogous to the description in the aforementioned characteristic f:



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In the figures of document DE 29.17.025, the panels also have a flange 202', as represented here below:



It is noted that this flange 202' is not mentioned in the aforesaid description and therefore is optional. This is confirmed by the description on page 4, last paragraph but one: "Weiterbildungen der Erfindung nach Anspruch 1 ergeben sich aus den Ansprüchen 2 bis 8", as well as by the contents of claim 3 in which is said that the part 200 is located in a recess (Tasche 201).

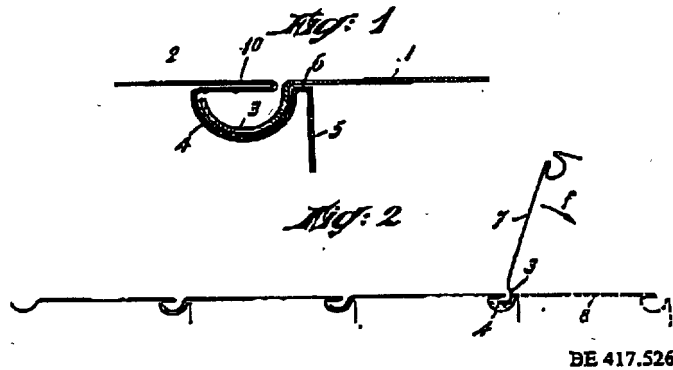
From this, it is obvious that the presence of this recess 201, and therefore also of the flange 202', is only a so-called "Weiterbildung", in other words, a preferred characteristic which is not necessarily present.

In consideration of the fact that the coupling of the European patent EP 0.698.162 is not limited to floor panels, but generally relates to all kinds of building panels, and even wall panels (see description column 1, lines 24 to 27: "It should however be emphasised that the invention is useful also for joining ordinary wooden floors as well as other types of building panels, such as wall panels and roof slabs."), it is evident that the document DE 2.917.025 represents a relevant anticipation belonging to the same technical field.

Summarized, it can be stated that the system, as described in claim 1 of EP 0.698.162, does not comply with the legal requirements of novelty with which an invention has to comply in order to be patentable.

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Note: a similar coupling is also known from the patent document BE 417.526.



Hereby, it is referred to the fact that the panels described in the Belgian patent No. 417.526 can also be applied for "planchers" (see claim 6), in other words, for floors.

c.3. The invention is not new in view of DE 7402354

The panels represented in the German utility model No. 7402354 relate to disconnectable panels which are mutually coupled by means of an edge connection showing all characteristics claimed in claim 1 of the European patent No. 0.698.162.

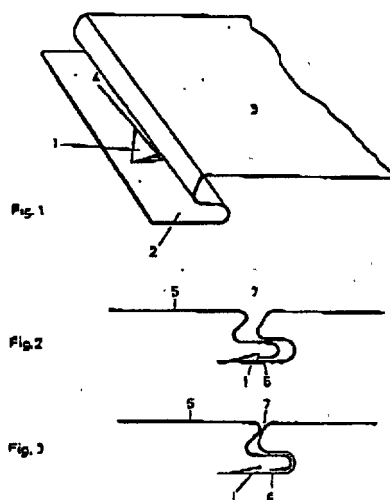
It is noted that the document DE 7402354 relates to facade panels, in other words, wall panels, and consequently is a document from the same technical field as EP 0.698.162 as, as presumed in this latter (see column 1, lines 24 to 27), this

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latter also relates to wall panels.

For the analysis following hereafter and the comparison of the characteristics, we refer to the copy of figures 1 to 3 of DE 7402354 here below.



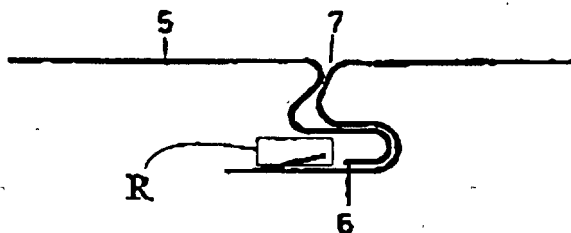
In greater detail, the following can be said in respect to the aforementioned characteristics a to f:

Characteristic a: the vertical locking is obtained by means of a classical tongue and groove.

Characteristic b: the parts 1 and the edge 6 together form a locking device with which a locking in horizontal direction is obtained, as the edge 6 is blocked behind the parts 1. It is noted that the space R indicated here below in fact also forms a groove at the rear side of the panel 5.

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Characteristic c: flange 2 also forms a continuous strip, whereas the part 1 forms a protruding locking element fitting into the groove which is formed by the space R. In coupled condition, the flange 2 also extends along the rear side of the panel 5.

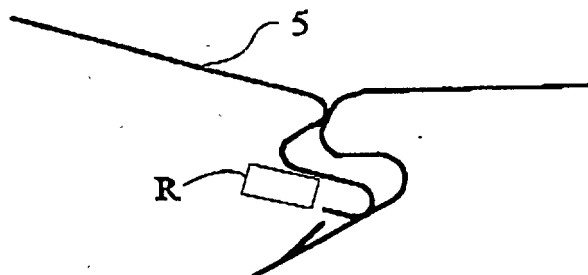
Characteristic d: figure 3 clearly represents that there is also a play between the locking surface of the element 1 and the edge 6.

Characteristic e: in consideration of the fact that the profiles of the edge 6 and the flange 2 extend in longitudinal direction, it is evident that the coupled panels according to DE 7402354 can also be shifted in the longitudinal direction of the joint.

Characteristic f: the figure here below shows that, when turning the panel 5, it is also possible to obtain that the part 1 leaves the aforementioned space R and an unlocking is obtained.

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Claim 1 of EP 0.698.162 thus does not comply with the stated requirement of novelty.

c.4. Claim 1 is not inventive, starting from the state of the art known from US 4.426.820

In the case that the patent proprietor still should be of the opinion that their patent also covers forms of embodiment in which the strip 6 is made in one piece with the rest of the panel (and without using an additional strip 74), it is obvious that a building panel, more particularly, a floor element, showing almost all characteristics named in claim 1, is also known from the state of the art described in the American patent No. 4.426.820.

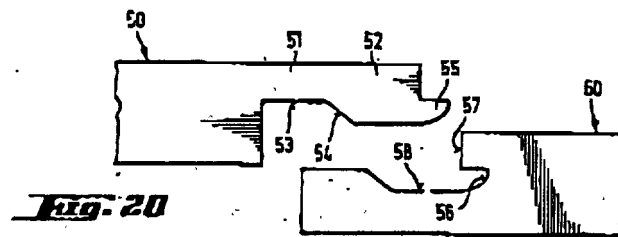
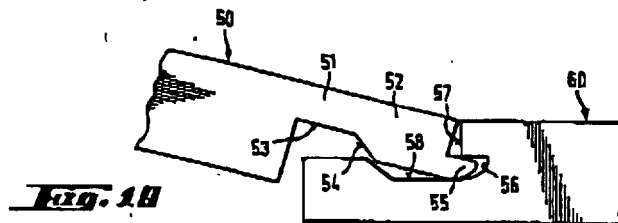
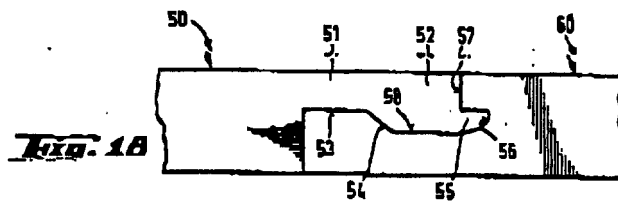
It is noted that US 4.426.820 is a document which, by the patent attorneys of VÄLINGE ALUMINIUM AB by means of a letter dated November 19th, 1998, has been brought to the knowledge of the European examiner handling the European patent application of the UNICLIC system.

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In fact, US 4.426.820 is little relevant in respect to anticipation for the UNICLIC system; it is, however, particularly relevant in respect to anticipation for various claims of the VÄLINGE patent EP 0.698.162.

To this end, it is referred, for example, to figures 18 to 20 of the aforementioned American patent, a copy of which figures is represented here below:



US 4.426.820

The American patent US 4.426.820 relates to panels intended for forming a floor and consequently is situated in the same technical field as the VÄLINGE patent EP 0.698.162.

A comparison with the aforementioned characteristics teaches us the following:

Characteristic a: the vertical locking is obtained by means of a tongue 55 fitting into a groove 56.

Characteristic b: the groove 53 and the part of the panel 60 cooperating therewith together form a locking device at the rear side of the panels, as a result of which a locking in horizontal direction is obtained. Hereby, the upstanding part of the panel 60 forms a locking element, identical to the locking element 8 of the VÄLINGE patent. The part 53 forms a locking groove which also is open at the rear side.

Characteristic c: the part situated under the plane 58 is flat and has a constant thickness and consequently forms a strip. This strip also extends over the complete length, and the locking element at the end of this strip is received in the groove 53 in coupled condition.

Characteristic d: the coupling known from US 4.426.820, however, does not show characteristic d, in other words, does not have any play which allows for the panels to assume a different relative position in the horizontal direction.

Characteristic e: as the edge profiles extend over the complete length, it is evident that the panels can be mutually shifted in the longitudinal direction. As the panels furthermore are made of synthetics, it is evident that the profiles have smooth surfaces, as a result of which their shifting doubtless is possible.

Characteristic f: in this case, the second mechanical connection is realized in such a manner that the locking element can leave the locking groove when the panel with the groove is turned along its joint edge, which can be derived unambiguously from figure 19, represented here above.

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From the aforementioned comparison, it becomes clear that the coupling known from the American patent US 4.426.820 differs from the coupling from claim 1 of the VÄLINGE patents EP 0.698.162 only in that no play is present.

However, it is obvious that, if one desires to obtain that the panels fit into each other more easily and that it becomes easier to shift them in mutual respect, one will realize the coupling more loosely by providing a play at one or more locations. Therefore, the fact that a play is applied, as defined in the aforementioned characteristic d of claim 1, cannot be considered an inventive step.

c.5. Claim 1 is not inventive, starting from the state of the art known from GB 2.256.023

In case that the patent proprietor still should be of the opinion that their patent also relates to forms of embodiment in which the strip 6 is realized in one piece with the rest of the panel (and without applying an additional strip 74), it is obvious that a building panel, more particularly, a floor panel, which shows practically all characteristics claimed in claim 1, also is known from the state of the art described in the British patent application GB 2.256.023.

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From the document GB 2.256.023, as visible in the copy of figures 4 and 5 following below, a coupling for panels is known which also provides for a mechanical connection in two directions, corresponding to the aforementioned directions D1 and D2. According to said document, this coupling can also be applied with floor elements, to which end we refer to the last three lines of the description on page 7: "...such as flooring, cladding of walls or ceilings or even the construction of sheds or the like", and, consequently, is also situated in the same technical field.

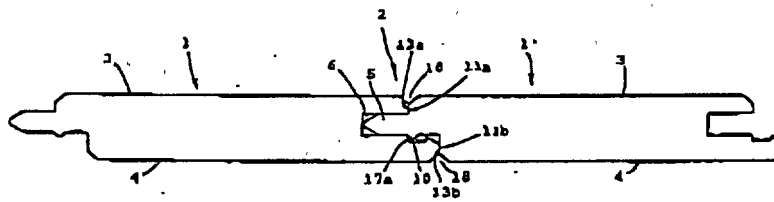


FIGURE 4.

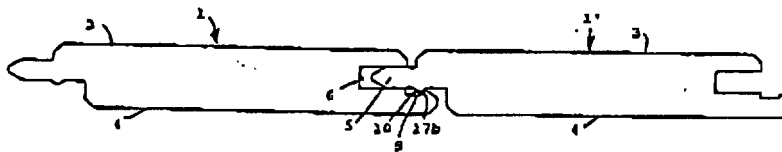


FIGURE 5.

At the underside of the panels described in GB 2.256.023, a protruding lip is provided having a groove at its extremity which groove is limited by an upstanding part 17b, whereby this upstanding part 17b engages in a locking groove of this other panel, which locking groove is formed by the space present between the protrusion 10 and the side 11b.

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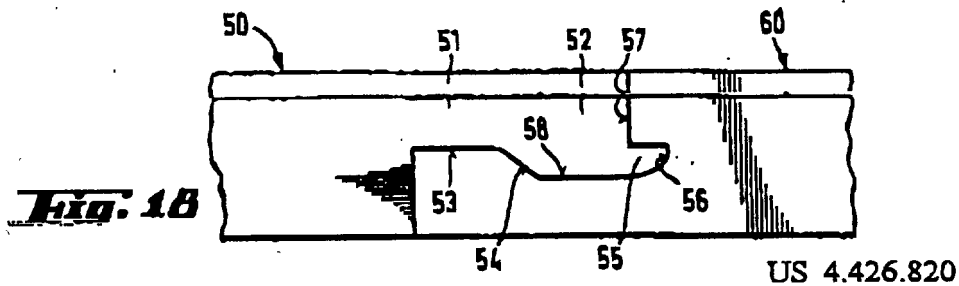
Thus, this protruding lip can be compared to the strip 6 described in claim 1. The only difference consists in that the locking element in the document GB 2.256.023 does not project from the strip 6, but in fact is formed by a part situated in the plane 6 of the strip.

The fact that according to EP 0.698.162, use is made of a locking element 8 projecting from the strip 6 in upward direction, instead of a locking element 17b created by a recess in the strip, cannot be considered an inventive step. As indicated in the following figure, it is, anyhow, within the knowledge of any skilled person to design the locking part higher, as a result of which the groove 9 can be omitted.

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Moreover, couplings having a strip with an upstanding portion are well known in themselves, amongst others, from the aforementioned document US 4.426.820:



The essential play (Delta) can also be found in the coupling known from GB 2.256.023. This play is visible in figures 4 and 5:

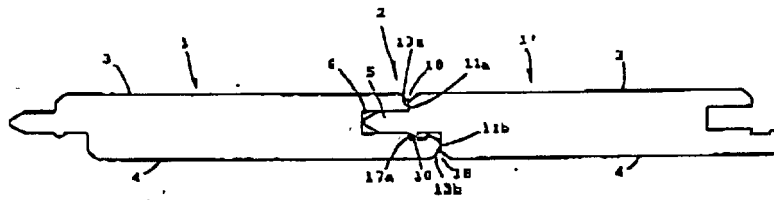


FIGURE 4.

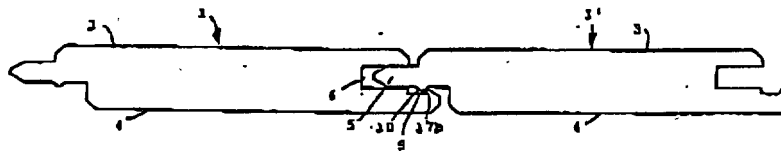


FIGURE 5.

Due to this play, two panels coupled to each other may take different positions in respect to each other, as is also evident in figures 4 and 5.

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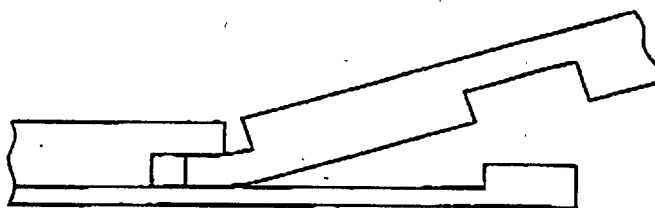
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The second mechanical connection of GB 2.256.023 shows a similar design as the one of the contested patent. Thus, it is obvious that the panels of GB 2.256.023 can be taken apart by a turning motion, in a similar way as in the VÄLINGE patent.

In view of the fact that the form of embodiment represented in GB 2.256.023 has a similar design as the embodiment of figure 1 of the European patent EP 0.698.162, it can be expected, anyhow, that the panels known from GB 2.256.023 also can be turned apart.

As represented here below, when taking apart the panels according to EP 0.698.162 a bending in the strip and/or the lip must take place, as otherwise it will not be possible to couple, respectively uncouple, the panels by means of a turning movement. Thus, there is no reason why, in the case of an embodiment according to EP 0.698.162, a turning apart indeed is possible, whereas this should not be possible in the embodiment of GB 2.256.023.



VÄLINGE patent

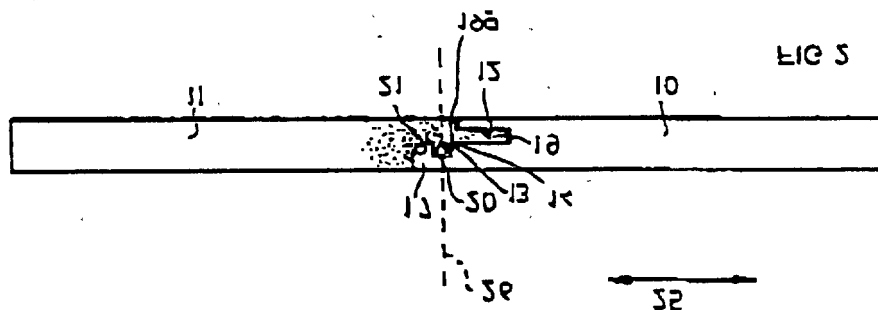
From the preceding, it is unambiguously evident that, in case the patent proprietor still should be of the opinion that their patent relates to forms of embodiment whereby the strip 6 is

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made in one piece with the panels, the invention claimed in claim 1 is not inventive in view of the state of the art known from GB 2.256.023 and, consequently, is no longer patentable.

It is noted that, starting from the patent document GB 1.430.423, a similar conclusion can be drawn, with the only difference that from this document, a coupling is known which does not show any play.

Indeed, in case that the coupling from the figures from GB 1.430.423 is applied upside down, a coupling is obtained which in many aspects corresponds to the coupling claimed in claim 1 of EP 0.698.162:

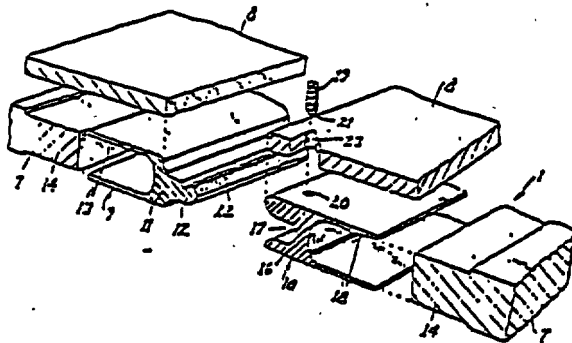
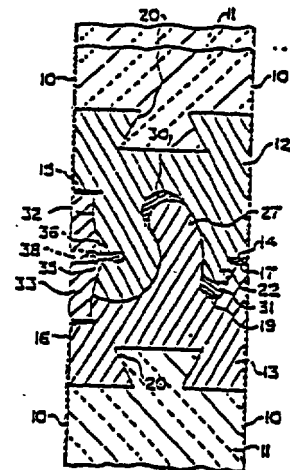
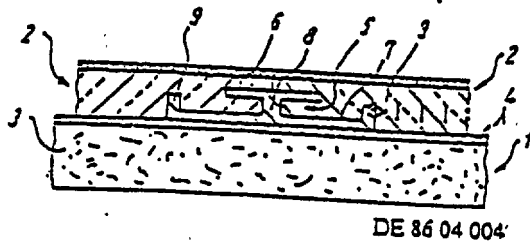


The only differences consist in that the part 17 does not project upward out of the strip and that no play is present between the locking surfaces of the part 17 and the locking groove 21.

d) Reasons for invalidity in the case that the strip in claim 1 consists of a separate element which is fixed at the panel

In case that the strip 6 is realized as a separate element, it has to be noted that it is generally known to couple panels by means of coupling parts in the form of a strip which is manufactured separately and is fixed to the panels.

Examples thereof are, amongst others, to be found in the documents DE 8604004, GB 2.117.813, US 3.310.919, US 3.859.000 and US 5.295.341:



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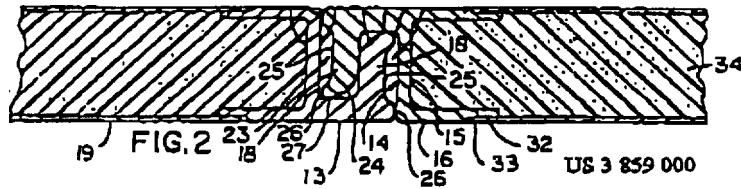
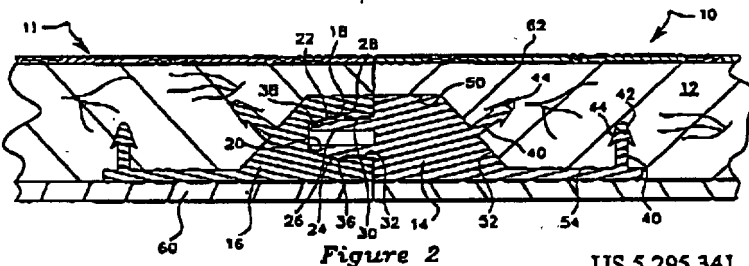


FIG. 2 US 3 859 000



US 5 295 341

As a result, no inventive step can be seen in the fact that a separate strip 6 is used which is fixed at the panel. It is rather within the range of knowledge of a skilled person that in the panel represented in the documents US 4.426.820, GB 2.256.023 and GB 1.430.423, the protruding lip, analogous to the coupling parts described in the aforementioned five patents, also can be manufactured as a strip consisting of a separate material.

e) Other relevant documents in respect to claim 1

In respect to claim 1 is noted that in fact it is generally known that panels, more particularly floor elements, can be coupled to each other by means of couplings providing in a locking in two directions, as a result of which a glue-free connection is realized.

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Hereto, reference is made to the following documents (amongst which also the aforementioned):

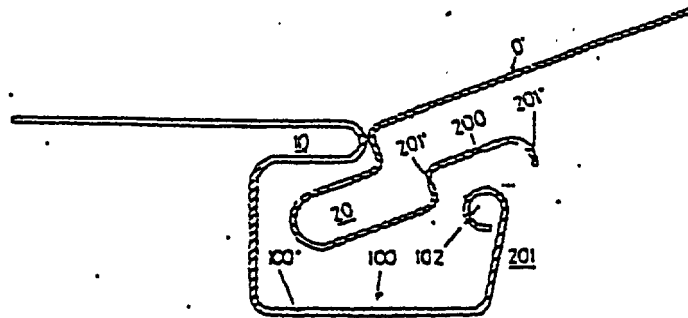
- BE 417.526
- DE 15.34.278
- DE 25.02.992
- DE 29.17.025
- DE 30.41.781
- DE 35.12.204
- DE 35.44.845
- DE 42.15.273
- DE 7102476
- DE 7402354
- DE 8604004
- FR 1.293.043
- GB 1.430.423
- GB 2.117.813
- GB 2.243.381
- GB 2.256.023
- JP 54-65528
- JP 57-119056
- JP 31-69967
- US 753.791
- US 1.124.228
- US 3.310.919
- US 3.694.983
- US 4.426.820
- US 4.769.963
- US 5.295.341
- WO 84/02155
- WO 93/13280

The large number of documents from which such couplings are known enables those skilled in the art to perform different combinations of characteristics, amongst which a large number of possibilities (starting from only two documents at a time) which lead to the combination of characteristics a to f of claim 1.

Claim 2

The characteristic of claim 2 states that the panels can be turned apart without the locking element 8 coming into contact with the locking surface of the groove 14.

This is also the case in the embodiment according to document DE 29.17.025. As represented here below, the tongue or nose 20 can be turned outward with the locking surface 201' moving freely along the locking element 102.



DE 29.17.025

Consequently, the characteristic of claim 1 is not new in view of the state of the art known from the patent document DE 29.17.025.

It is noted that in the embodiment according to GB 2.256.023, the panels, as aforesaid, also can be turned apart. Due to the relatively wide groove 9, it is evident that the protrusion 10 hereby can leave the groove 9 without coming into contact with the upstanding side 17b. According to document GB 2.256.023, thus a similar effect is obtained. Claim 2 therefore is not inventive.

Claim 3

In claim 3 is stated that the projecting locking element 8 projects maximally 2 mm out of the strip 6 in upward direction

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Normally, it can be expected that the panels of GB 2.256.023 have a thickness varying between 0,8 and 2 cm (classical deal thickness), as a result of which it can be derived from the figures of GB 2.256.023 that the height of the locking surface 17b also is smaller than 2 mm.

Consequently, the characteristic of claim 1 is known in itself from GB 2.256.023 and thus, as claim 3 is depending on the claims 1 and 2, does not show any inventivity.

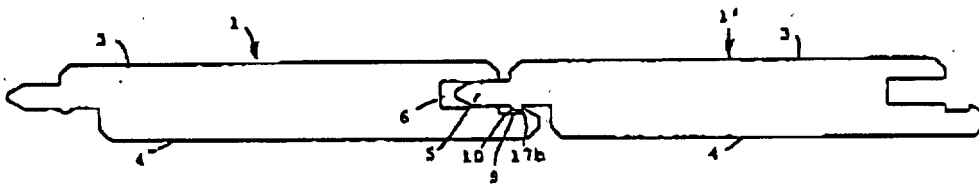
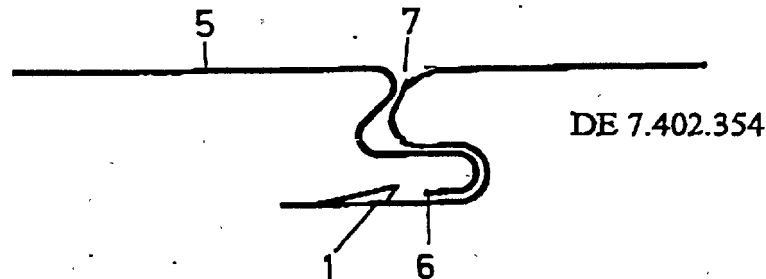


FIGURE 5.

GB 2.256.023

Claim 4

In claim 4 is stated that the first mechanical connection is formed by the edge 4 of a first panel, which edge engages between the edge 3 of the second panel and the front side (with which the upper side is intended) of the strip 6.



36

This characteristic in itself is known from DE 7.402.354 and, as it depends on the claims 1 and 3, the characteristic of claim 4 therefore also is no longer new.

Besides, this characteristic also is to be found in the coupling known from the document BE 417.526. As represented here below, the coupling part 3 is held between portion 10 and portion 4, as a result of which a locking in the first direction is obtained in an identical manner.

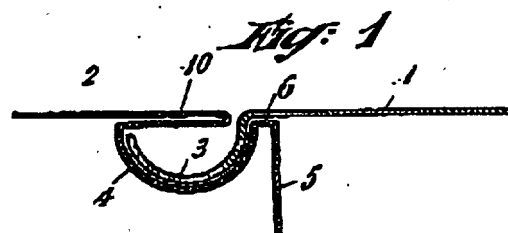
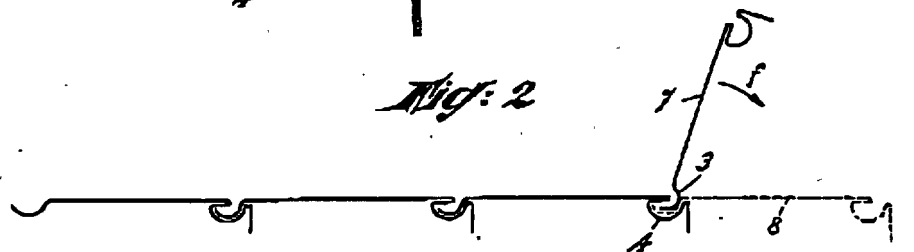


Fig. 2



BE 417.526

In the forms of embodiment of GB 2.256.023, the vertical locking is also obtained in that the tongue of the one panel engages between the walls of the groove of the other panel. Consequently, in view of GB 2.256.023 the characteristic of claim 4 neither is inventive.

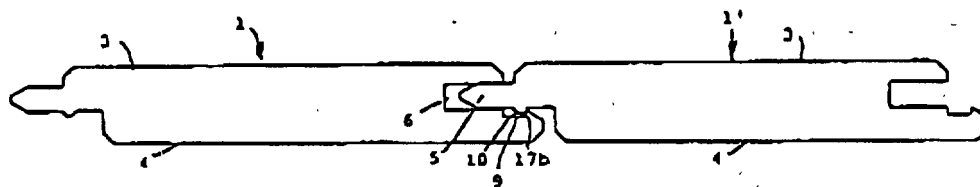


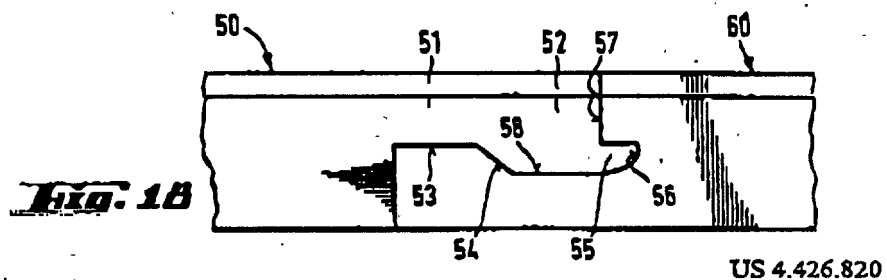
FIGURE 5.

GB 2.256.023

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The same can be said starting from couplings known from US 4.426.820:



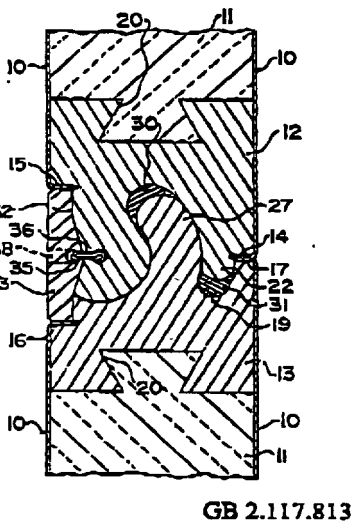
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Claim 5

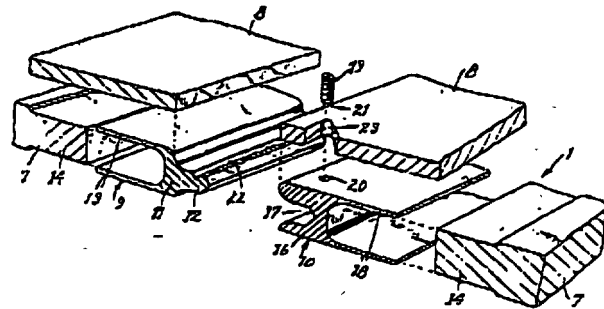
The characteristic according to claim 5 that the strip 6 is made from a material different from that of the rest of the panel and is already fixed at the panel during manufacturing, is not inventive in consideration of the fact that the application of coupling strips made from another material than the one of the panels to which they belong, already belongs to the state of the art for a long time, also in the case of floor elements.

To this end, reference is made to the state of the art known from, amongst others, the patent documents GB 2.117.813, US 3.310.919, US 3.538.665, US 3.859.000 and US 5.295.341.

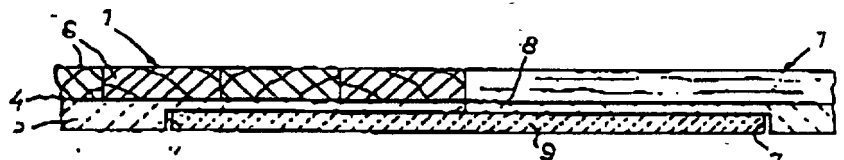
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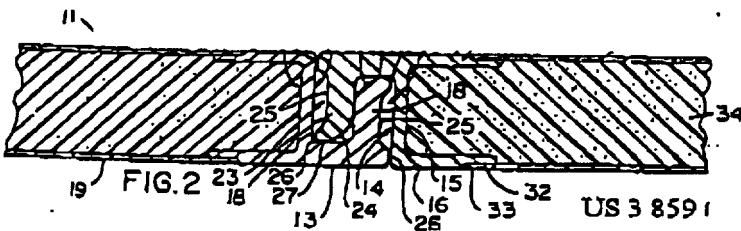
GB 2.117.813



US 3 310 919



US 3 538 665



US 3 859 000

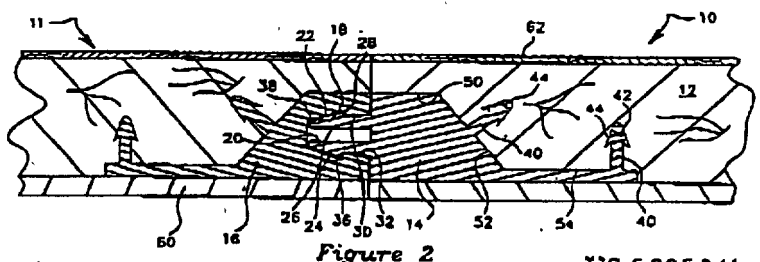


Figure 2

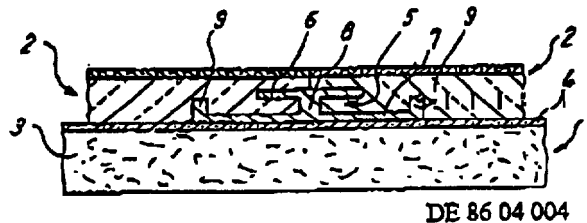
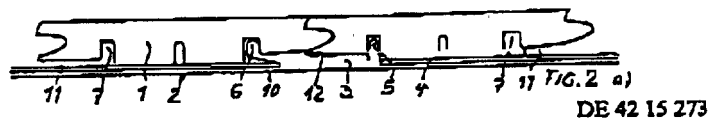
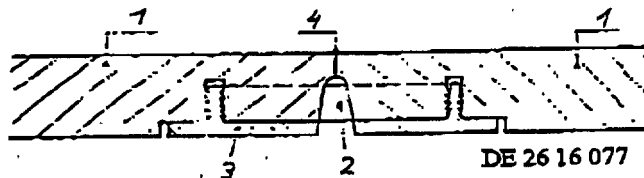
TIS 5 295 341

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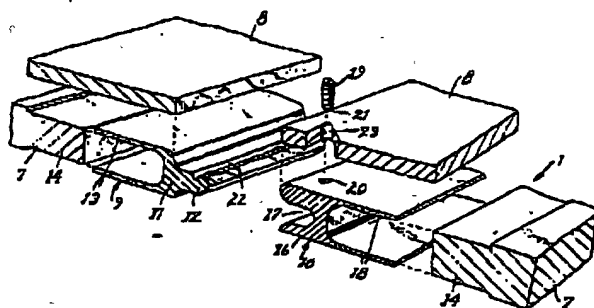
Consequently, it is within the normal knowledge of a person skilled in the art to make use of a two-piece embodiment instead of the aforementioned one-piece embodiment, whereby the strip then consists of another material and is attached fixedly at the panel.

Claim 6

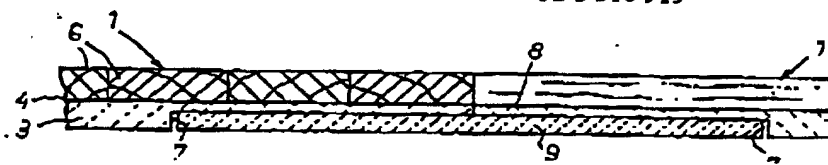
That the strip 6 is taken up into a countersunk groove 40-42 at the rear side of the panel, neither is inventive in combination with the aforementioned. The application of joint elements countersunk into the rear side of the panel is, amongst others, known from the patent documents DE 26.16.077, DE 42.15.273, DE 86.04.004, US 3.310.919, US 3.538.665, US 3.859.000 and US 5.295.341, as becomes clear from the copies of the relevant figures of these documents represented here below.



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US 3 310 919



US 3 538 665

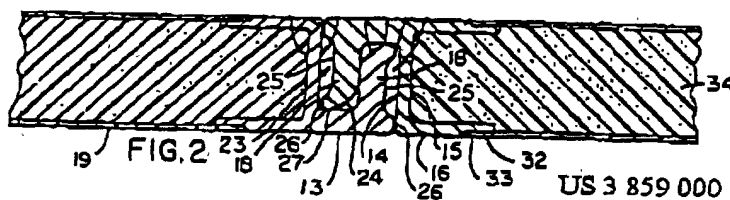


FIG.2

US 3 859 000

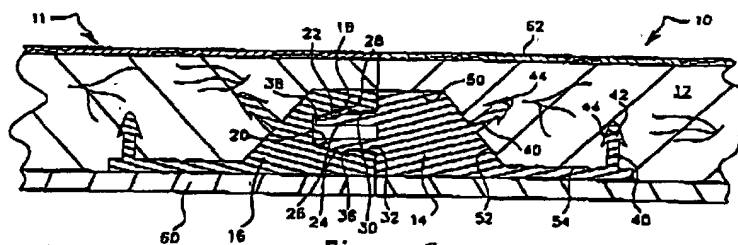


Figure 2

US 5 295 341

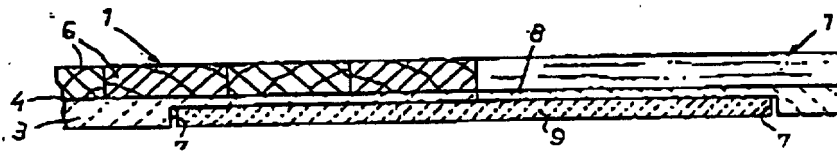
Consequently, this characteristic in itself is widely known from the state of the art. The combination with one of the characteristics of the preceding claim does not result in any

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special technical effect. Thus, there can not be spoken of any inventive step.

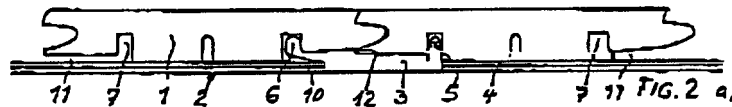
Claims 7 and 8

The use of a so-called "equalising groove" neither shows any inventive step, this starting from the patent document US 3.538.665, pertaining to the state of the art, in which also use is made of a strip 6 which is provided in a recess at the rear side of the panel:



US 3 538 665

It is noted that also in the system known from the patent document DE 42.15.273, similar "equalising grooves" are applied.



DE 42 15 273

Claim 9

Claim 9 states that the strip 6 is mechanically fixed at the panel.

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It is obvious that the fact that two mechanical parts can be fixed at each other also in a mechanical manner, is a trivial fact and consequently can not form an inventive characteristic.

Furthermore, the application of a coupling strip which is connected to the panel during manufacturing by realizing a mechanical engagement, is already known from US 5.295.341, whereby the mechanical locking is obtained by the barbs 42.

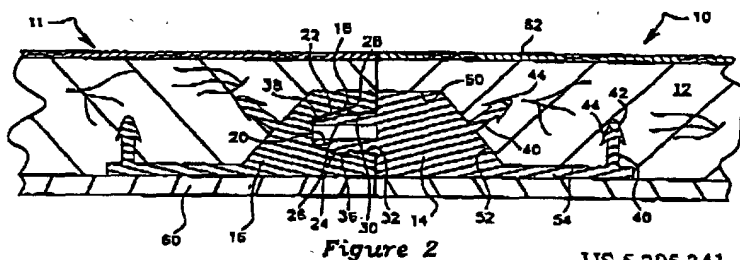


Figure 2

US 5 295 341

Claims 10, 11 and 12

The realization of an attachment by means of lips which are bent, or by means of glue is a well-established attachment technique for connecting mechanical parts.

The application thereof in the panels concerned for the attachment of the strip 6, thus, is trivial and not inventive.

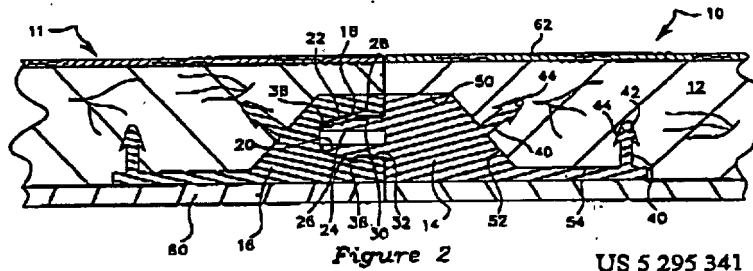
Claim 13

The fact that a strip 6 is applied made of a material differing from the material of the panel and that to this end a flexible material, more particularly, aluminium, is used, neither

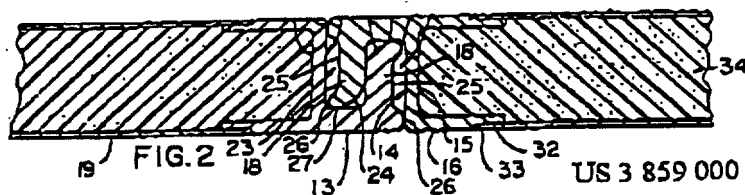
43

reveals any inventivity.

The application of a coupling strip of "flexible" material for connecting floor elements is known from the patent document US 5.295.341, where a coupling strip made of synthetic material is used:



On the other hand is it known from US 3.859.000 to apply "metal strips" which are fixed at panels made of another material:



Furthermore, it is known from the already mentioned documents DE 29.17.025 and DE 7402354 to manufacture the strip in one piece with the panel from a metal plate, such that also a "flexible metal strip" is obtained.

It is evident that the combination of the teachings of two or more of the aforementioned documents automatically leads to the characteristic of claim 13.

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204750-96954560

Claim 14

Claim 14 has been added during the granting procedure of the European patent.

According to this claim, protection is sought for the fact that the strip 6 is realized integrally, in other words, in one piece, with the panel.

The subject of this claim extends beyond the scope of the application, as originally filed, amongst others, for the reasons explained hereafter.

In the originally filed application is clearly defined that the aim of the invention consists in providing a coupling system for panels whereby the strength of the coupling is no longer limited by the strength of the material of the panel.

It is evident that, according to the originally filed description, this can be obtained only in two manners, namely:

- a. by using a separate strip 6 made of another material which is more stable than the material of the panels themselves;
- b. by using, as represented in figure 5 of the patent, a strip 6 which is realized in one piece with the panel, however, in that case in fact is combined with an additional strip 74.

In other words can be said that each embodiment comprising a strip 6 which is made in one piece with the panel, whereby, however, no further separate strip (such as the strip 74) is applied, extends beyond the scope of the original application, on one hand, as such an embodiment offers no longer a solution to be solved by the invention and, on the other hand, as such

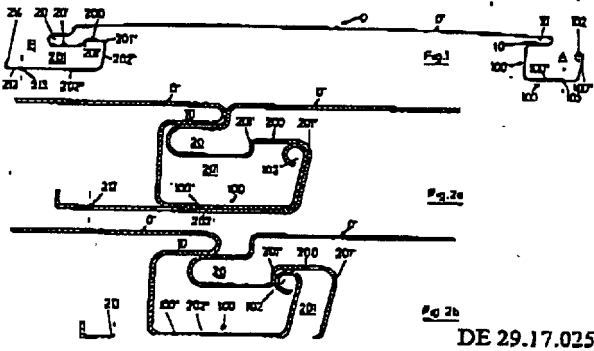
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201150-96954260

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an embodiment in itself is not described in the original application.

Thus, claim 14 has been granted unjustified.

Further, it is also clear that the characteristic of claim 14 is not new in view of the fact that the application of a strip or lip which is made in one piece with the panel and, besides, also shows the characteristics of claim 1, is known from the aforementioned patent documents DE 29.17.025 and DE 7402354, as well as from the "scarf" connection represented in WEBSTER'S.



DE 29.17.025

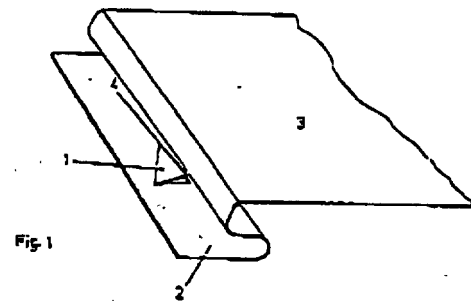


Fig. 1

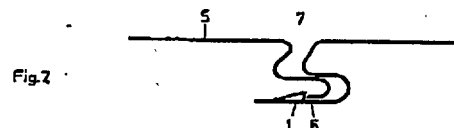


Fig. 2

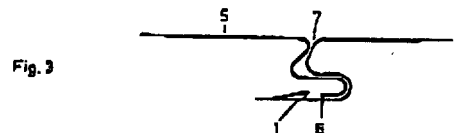
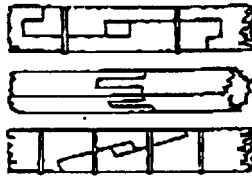


Fig. 3

DE 7402354

scarf' (skärf) *n. pl.*
 scarfs 1 In carpentry, a lapped joint made as by notching two timbers at the ends, and bolting them together so as to form one continuous piece without increased thickness; also scarf joint. 2 The notched end of either of the timbers so cut. 3 A cut or incision in the blubber of a whale. — *v.t.*
 1 To unite with a scarf joint. 2 To cut a scarf in. 3 To *scarf* a notch in a timber!



TYPES OF SCARF JOINTS

WEBSTER'S

Moreover, the characteristic of claim 14 is also known from the aforementioned documents GB 2.256.023 and US 4.426.820, as a result of which this characteristic is not inventive, either.

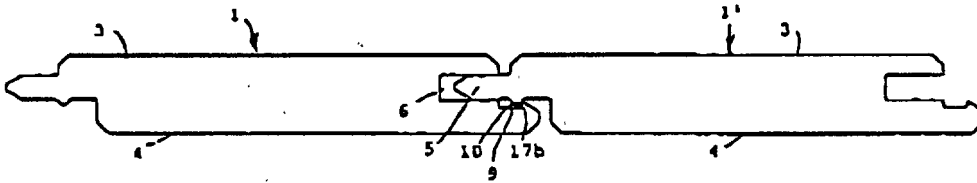
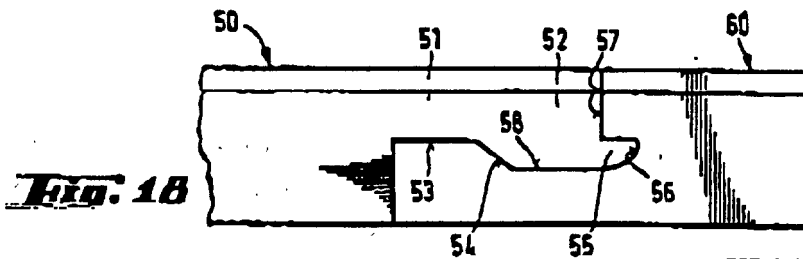


FIGURE 5.

GB 2.256.023



US 4.426.820

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Finally, considering claim 14, it is noted that the patent text contains no information for a skilled person at all which describes how the one-piece strip 6, in the case of thin floor panels, has to be realized in case the strip 74 is omitted.

It is not evident that, in such case, the thus remaining flat and weak strip 6 in practice still might function as a joining strip.

As far as the patent relates to a strip which is made in one piece with the panel and does not comprise an additional strip 74, it is noted that this is not described in a sufficiently clear way in order to be realized in thin floor panels by a person skilled in the art.

In this respect, the description does not comply with Article 83 EPC.

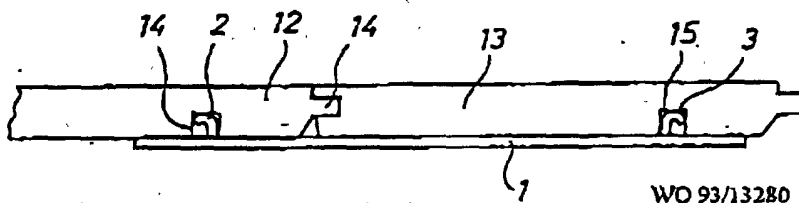
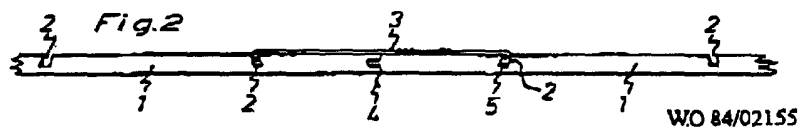
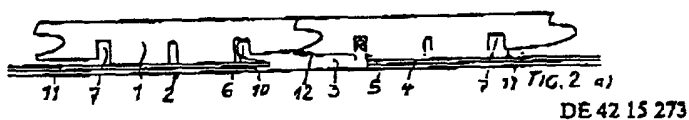
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Claim 15

The fact that the locking element 8 consists of an edge extending continuously along the strip 6 neither is new, inventive, respectively, in view of the aforementioned documents DE 29.17.025, BE 417.526, GB 2.256.023, US 4.426.820 and others.

Claim 16

The use of a plurality of locking elements 8 spaced apart in respect to each other is a fact which is known in itself from the state of the art described in the documents DE 42.15.273, WO 84/02155 and WO 93/13280.

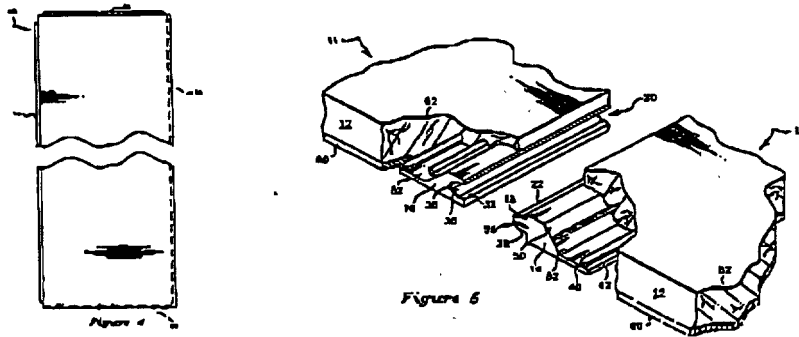


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Hereby, documents are concerned whereby loose coupling parts are applied. It is, however, evident that such coupling parts provided at a mutual distance also can be attached fixedly at the panels.

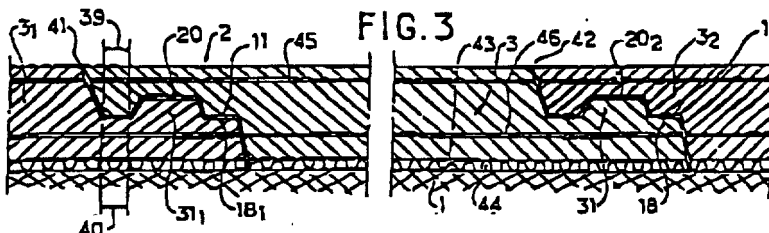
Claim 17

Claim 17 relates to the fact that the panels can be coupled to each other at the four sides by means of the aforementioned locking elements. This characteristic, too, is trivial and not inventive in consideration of the fact that it is generally known to provide floor panels with locking elements at their four sides. To this end, we refer to the figures of, for example, the patent documents CH 200.949, DE 25.02.992, DE 26.16.077, DE 8604004, FR 1.293.043, FR 2.568.295, GB 424.057, US 4.426.820 and US 5.295.341 (the latter is represented here below by way of example).



Claim 18

The characteristic of fixing an underlay under the panels is known from the French patent application No. 2.568.295. Herein, figure 3 clearly shows the use of such an underlay 44.



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The fact that such an underlay is applied in a floor panel, as described in the European patent in question, in itself does not result in an additional special effect, from which it is evident that this, then, is not inventive, either.

Also, the fact that felt, foamed material or the like is used for the underlay is not inventive, either. According to the document FR 2.568.295, also use is made of a deformable material, which in fact provides the same effect as felt, foamed material or the like.

Claim 19

This claim relates to the fact that the underlay extends at least up to the locking element 8, such that the edge of the underlay is shifted in respect to the actual edges 3-4 of the panels.

This characteristic unambiguously can be found in the above-represented figure 3 of FR 2.568.295 and, consequently, is not inventive, either.

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Claim 20

The use of a sealing strip is not inventive, either, as it has been known before to apply a strip between coupled panels. Examples thereof are, for example, the strips 30 and 31, as represented in the drawings of GB 2.117.813.

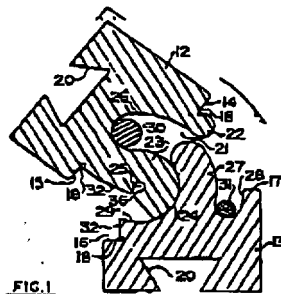


FIG. 1

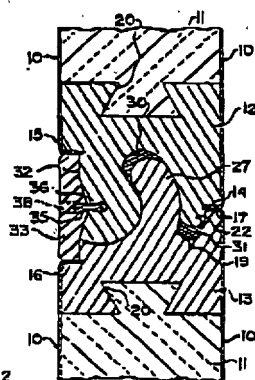


FIG. 2

GB 2.117.813

The use of sealing strips or sealing compounds is also known from the patent documents CH 200.949 (binding agent in groove 8) and GB 2.243.381 (sealing 32).

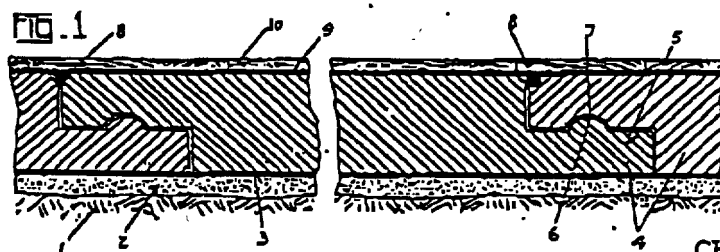
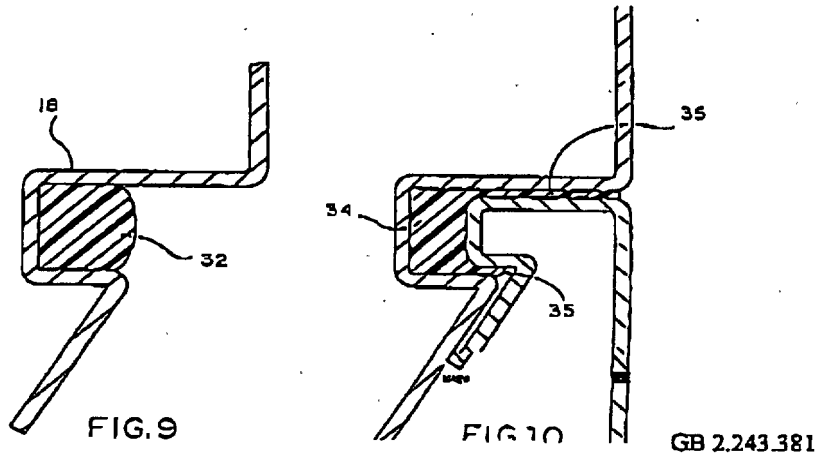


FIG. 1

CH 200.949

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Claims 21 and 22

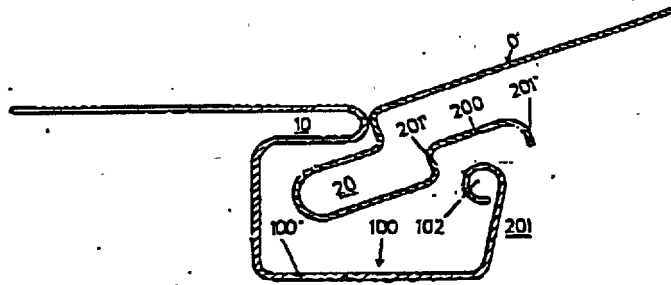
These claims have been added later to the patent application and are exclusively based on the figures thereof.

In the description of the originally filed patent application, it is nowhere stated explicitly that the invention has to be seen in the fact that the locking means are realized in such a manner that they can remain in contact at their upper edges when turning them together, apart respectively.

Thus, the scope of these claims extends beyond the scope of the original description. According to the European Patent Convention, these claims thus are invalid.

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Moreover, the fact that the panels during turning can be held in contact at their upper edges, is not new as this obviously is known from the document DE 29.17.025:



DE 29.17.025

Couplings providing for a locking in two directions and allowing for the panels to remain with their edges in contact when being turned apart, are also known from the following publications: WEBSTER'S; BE 417.526, DE 30.41.781, DE 42.15.273, DE 7402354, GB 2.117.813 and GB 2.243.381 and US 4.426.820, resulting in that no longer any inventivity can be claimed.

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V. FINAL OBSERVATIONS

It is noted that VÄLINGE ALUMINIUM AB, during the granting procedure of EP 0.698.162, tried to broaden the extent of protection of claim 1 by removing the aforementioned characteristic d), in other words, the feature of the play, from the claim. The examiner did not permit this as, in his opinion, there is no base in the originally filed patent application for embodiments without play. To this end, we refer to the examination rapport of October 31st, 1997, from which we cite the following:

"The amendments filed with the letter dated 26.06.1997 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 123(2)EPC. The amendment concerned is the deletion of an essential feature of claim 1.

In the originally filed claim 1, it was stated that the panels, when joined together, have play so as to be able to occupy a relative position in the "second" direction.

This feature characterised claim 1 over the closest prior art, SE-A-450 141.

The deletion of this feature contravenes Article 123(2)EPC, as there is no disclosure in the originally filed application that this feature is not an essential feature. It is consistently presented as an essential feature. Furthermore, by deleting this feature, the subject matter of claim 1 appears to no longer support an inventive step."

The examiner is unambiguously right in this matter: when reading the originally filed text, it is obvious that the aforementioned play is an essential element which can not be omitted from any of the described forms of embodiment.

VI. GENERAL CONCLUSION

The European patent EP 0.698.162 has to be regarded as invalid:

a) as none of the claims 1 to 22 of this patent complies to the requirements of novelty and/or inventive step stipulated by the European Patent Convention;

b) as the extent of protection of several claims is not based on the contents of the patent application, as originally filed.

c) as the invention, in certain respects, is not described in a manner sufficiently clear in order to be realized by a person skilled in the art.

For these reasons, we hereby request, in the name of our clients, that the European patent EP 0.698.162 is revoked in its entirety.

Antwerp, January 4th, 1999



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European Patent Attorney

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Nr./Ref./Rn.

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Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

VÄLINGE ALUMINIUM AB

COMMUNICATION OF NOTICES OF INTERVENTION (ARTICLE 105 EPC)

Notice(s) of intervention has(have) been received after expiry of the opposition period from:

1. E.F.P. FLOOR PRODUCTS Färböde GmbH

2.

A copy(Copies) of the notice(s) of intervention mentioned above is(are) attached.

You are requested to file your observations, together with 3 copies thereof for the other parties concerned (Rule 36(4) EPC), within a period of 4 months from notification of this communication.*

You may also file amendments, where appropriate, to the description, claims and drawings within the period specified. Three separate copies of these documents are to be filed for the EPO and 3 copy/copies for the other parties concerned (Rule 36(1) and (4) EPC).

If you introduced documents which have not yet been mentioned during the proceedings you are requested to file two copies of these documents. Attention is drawn to Rule 59 EPC.

J. Bach
Formalities Officer
Tel.: (089)2399-8224

Enclosures: Notice of intervention
(0111)

* Please note that extensions of time limit will probably not be granted (see letter 011 dated 26.11.99)

REGISTERED LETTER

EPO Form 2317B 12.92

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